

Course Handbook Supply Chain Management Master

created at 15.07.2021,15:31

Head of Studies	Prof. Dr. Teresa Melo
Deputy Head of Studies	Prof. Dr. Thomas Bousonville
Chairman of Examination	Prof. Dr. Ralf Rockenbauch
Deputy Chairman of Examination	Prof. Dr. Udo Venitz

Supply Chain Management Master - mandatory courses (overview)

Module name (EN)	Code	Semester	Hours per semester week / Teaching method	ECTS	Module coordinator
Advanced Operations Research	MASCM-240	2	4VU	6	Prof. Dr. Teresa Melo
Business Process and Quality Management	MASCM-130	1	4V	6	Prof. Dr. Thomas Korne
Data Science	MASCM-141	1	4V	6	Prof. Dr. Stefan Selle
International Supply Management	MASCM-220	2	4VU	6	Prof. Dr. Thomas Korne
Lean Production Concepts and Methods	MASCM-120	1	4VU	6	Prof. Dr. Steffen H. Hütter
Logistics Seminar	MASCM-110	1	4S	6	Prof. Dr. Thomas Bousonville
Master's Colloquium	MASCM-320	3	2S	2	Prof. Dr. Teresa Melo
Master's Thesis	MASCM-310	3	-	22	Prof. Dr. Teresa Melo
Study Project	MASCM-230	2	4PA	6	Prof. Dr. Thomas Bousonville
Supply Chain Planning	MASCM-210	2	4VU	6	Prof. Dr. Thomas Bousonville

(10 modules)

Supply Chain Management Master - optional courses (overview)

Module name (EN)	Code	Semester	Hours per semester week / Teaching method	ECTS	Module coordinator
Academic Communication	MASCM-510	-	4V	6	Prof. Dr. Thomas Tinnefeld
Applied Business Ethics	MASCM-540	-	4S	6	Prof. Dr. Christian Conrad
Business English II	MASCM-512	-	4V	6	Prof. Dr. Thomas Tinnefeld
Business French - Language and Intercultural Communication	MASCM-514	-	4V	6	Prof. Dr. Thomas Tinnefeld
Business Simulation Game	MASCM-582	-	4S	6	Prof. Dr. Jochen Pilhofer
Competition, Strategy & Innovation	MASCM-580	-	4V	6	Prof. Dr. Markus Münter
Digitization in Finance and Accounting	MASCM-574	-	4V	6	Prof. Dr. Christoph Freichel
European Spring Academy	MASCM-584	-	4SU	6	Prof. Dr. Stefanie Jensen
Financial Communication and Balance Sheet Analysis	MASCM-570	-	4V	6	Prof. Dr. Jochen Pilhofer
Green Economy	MASCM-555	-	4VF	6	Prof. Dr. Thomas Korne
Local Urban Mobility and Logistics Optimization	MASCM-553	-	4S	6	Prof. Dr. Steffen H. Hütter
Managing a Company Correctly: Legal Management	MASCM-542	-	4V	6	Prof. Dr. Sybille Neumann
Marketing Controlling	MASCM-562	-	4V	6	Prof. Dr. Tatjana König

Practical Phase - Internship	MASCM-Z1	-	-	30	Studienleitung
Professional Personnel Selection and Self-Positioning for Specialists and Managers	MASCM-532	-	4S	6	Prof. Dr. Markku Klingelhöfer
Research Phase - Internship	MASCM-Z2	-	-	30	Studienleitung
Self-Reflection and Storytelling	MASCM-533	-	4S	6	Prof. Dr. Markku Klingelhöfer
Simulation in Production and Logistics	MASCM-550	-	4V	6	Prof. Dr. Thomas Bousonville
Web-Based Knowledge Management	MASCM-520	-	4V	6	Prof. Dr. Stefan Georg

(19 modules)

Supply Chain Management Master - mandatory courses

Advanced Operations Research

Module name (EN): Advanced Operations Research
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-240
Hours per semester week / Teaching method: 4VU (4 hours per week)
ECTS credits: 6
Semester: 2
Mandatory course: yes
Language of instruction: English
Assessment: Written exam and project work (120 minutes / Weighting 2:1 / Can be repeated semesterly) [updated 13.09.2018]
Curricular relevance: DFMM-MASCM-240 Management Sciences, Master, ASPO 01.10.2018, semester 1, mandatory course MASCM-240 Supply Chain Management, Master, ASPO 01.04.2016, semester 2, mandatory course MASCM-240 Supply Chain Management, Master, ASPO 01.04.2017, semester 2, mandatory course
Workload: 60 class hours (= 45 clock hours) over a 15-week period. The total student study time is 180 hours (equivalent to 6 ECTS credits). There are therefore 135 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Teresa Melo
Lecturer: Prof. Dr. Teresa Melo [updated 01.04.2017]

Learning outcomes:

After having successfully completed this module, the student will:

- have obtained practice and experience in formulating realistic (integer) linear programming models,
- be aware of the applications of linear programming encountered in practice,
- have developed an appreciation for the diversity of problems that can be modeled as linear programs,
- be aware of the power and limitations of optimization methods,
- understand the concept of multicriteria decision-making and how it differs from situations and procedures involving a single criterion,
- be able to develop a goal programming model of a multiple criteria problem,
- be aware of major heuristic techniques and know when and how to apply them,
- be familiar with commercial software such as Excel Solver,
- be able to interpret the computer solution of a linear programming problem and perform a sensitivity analysis.

[updated 13.09.2018]

Module content:**1. Linear programming revisited:**

- Building linear programming models
- Typical applications in production and distribution planning
- Economic interpretation of a solution
- Duality theory and sensitivity analysis

2. Multi-criteria decision problems:

- Motivation and examples of conflicting objectives
- Preemptive and non-preemptive goal programming
- The analytic hierarchy process (AHP)

3. Integer and mixed-integer linear programming:

- Formulation of optimization models with discrete decision variables
- Innovative uses of binary variables in model formulation
- Sample applications in logistics and supply chain planning
- The branch-and-bound technique

4. Metaheuristics:

- The nature of metaheuristics
- Tabu search
- Simulated annealing
- Genetic algorithms

5. Formulating and solving optimization models on a spreadsheet (Excel Solver)

[updated 13.09.2018]

Teaching methods/Media:

Lecture and discussion in a large group using transparencies (projector) and the blackboard (theory and examples).

The lecture will be supplemented by exercises. In order to support independent work a large number of exercise sheets covering the wide range topics in this module will be provided. Afterwards, the solutions will be discussed with the students (partly using optimization software).

Both the lecture notes and the exercise sheets will be available to students in electronic form.

[updated 13.09.2018]

Recommended or required reading:

Anderson, D. R., Sweeney, D. J., Williams, T. A., Camm, J. D., Cochran, J. J., Fry, M. J., Olhmann, J. W.: An Introduction to Management Science: Quantitative Approaches to Decision Making (14th edition). Cengage Learning, 2015

Hillier, F., Lieberman, G.: Introduction to Operations Research (9th edition). McGraw Hill Higher Education, 2010

Williams, H. P.: Model Building in Mathematical Programming (5th edition). Wiley, 2013

Winston, W. L.: Operations Research: Applications and Algorithms (4th edition). Cengage Learning, 2004

[updated 13.09.2018]

Business Process and Quality Management

Module name (EN): Business Process and Quality Management
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-130
Hours per semester week / Teaching method: 4V (4 hours per week)
ECTS credits: 6
Semester: 1
Mandatory course: yes
Language of instruction: English/German
Assessment: Written exam (120 minutes / can be repeated semesterly) [updated 13.09.2018]
Curricular relevance: DFMM-MASCM-130 Management Sciences, Master, ASPO 01.10.2018, semester 1, mandatory course MASCM-130 Supply Chain Management, Master, ASPO 01.04.2016, semester 1, mandatory course MASCM-130 Supply Chain Management, Master, ASPO 01.04.2017, semester 1, mandatory course
Workload: 60 class hours (= 45 clock hours) over a 15-week period. The total student study time is 180 hours (equivalent to 6 ECTS credits). There are therefore 135 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Thomas Korne
Lecturer: Prof. Dr. Thomas Korne [updated 01.04.2017]

Learning outcomes:

Process Management:

After successfully completing this module, students will be able to:

- _ analyze, design and optimize business processes,
- _ develop specific competencies for controlling and optimizing business processes
- _ implement common techniques (e.g. IT-supported BPM/BPR tools such as Visio and ARIS, as well as modeling methods) to introduce and improve business process management,
- _ develop process concepts for the introduction of a company-specific business process management system,

- _ identify, model and improve process methods and tools for specific functions and industries,
- _ recognize and set process goals,
- _ check and monitor the achievement of goals,
- _ implement process controlling and promote the integration of business process management and quality management into an integrated management system.

Quality Management:

After successfully completing this module, students will be able to:

- _ assess the importance of quality as a competitive and cost factor,
- _ explain the basic concepts of QM and the underlying standards (in particular ISO 9000 ff; TS 16949.),
- _ implement a basic QMS and identify core and support processes based on real company examples and design them according to quality standards,
- _ apply current techniques and instruments for efficient process documentation (e.g. Visio, ARIS,...),

- _ implement an auditing process,
- _ prepare internal and external audits,
- _ create professional interfaces to environmental management and occupational safety management systems and develop integrated management systems,
- _ analyze the various requirements of different industries (automotive industry, food industry, pharmaceutical industry) and the resulting industry-specific standards (food -> HACCP systems, BRC, IFS, EUROGAP, pharmacy -> GMP, GLP),

- _ discuss quality-related management methods such as EFQM and Six Sigma,

- _ explain quantitatively-oriented quality tools such as Pareto analysis, control charts, FMEA, QFD, etc. and apply them appropriately.

Process Management:

[updated 13.09.2018]

Module content:

1. Basics of business processes (business and technical)
2. Basics of business process management
3. Enterprise modeling
4. Business process modeling
5. Implementation with BPR tools
6. Introduction and optimization

Quality Management:

1. Basics
2. Basic standards (ISO 9000, TS 16949)
3. Structure of a QMS
4. Q process design and documentation
5. Auditing and auditing techniques
6. Integrated management systems
7. Industry-specific QMS
8. Further developments (EFQM, SIX SIGMA)
9. Quality tools (Pareto, control charts, FMEA, QFD)

[updated 13.09.2018]

Teaching methods/Media:

Lecture with integrated exercises/case studies (partly on PC) using written documents; projector presentations, blackboard

[updated 13.09.2018]

Recommended or required reading:

Process Management:

T. Füermann, C. Dammasch (2008): Prozessmanagement, 3. Auflage. Verlag C. Hanser
Jochem/Mertins/Knothe (2010): Prozessmanagement, Symposion Publishing
Koch/Zeiler (2010): Geschäftsprozessmanagement, WITEC Verlag
Komus (2011): BPM Best Practice, Springer Verlag
Knuppertz/Feddern (2011): Prozessorientierte Unternehmensführung, Verlag Schaeffer-Poeschl
Schmelzer/Sesselmann (2010): Geschäftsprozessmanagement in der Praxis, Verlag C. Hanser
Schwab (2011): Geschäftsprozessmanagement mit Visio, Viflow und MS Project, Verlag C. Hanser
Seidelmeier (2010): Prozessmodellierung mit ARIS, 3. Auflage, Verlag Vieweg und Teubner
Slama/Nelius (2011): Enterprise BPM, Verlag dpunkt

Quality Management:

Brüggemann/Bremer (2012): Grundlagen Qualitätsmanagement, Verlag Vieweg und Teubner
Brunner/Wagner (2010): Qualitätsmanagement, 5. Auflage,; Verlag C. Hanser
Kamiske (2012): Handbuch QM Methoden, Verlag C. Hanser
Schmidt/Pfeifer (2010): Qualitätsmanagement, 4. Auflage, Verlag C. Hanser
Timischl (2012): Qualitätssicherung, 4. Auflage, Verlag C. Hanser
Zollondz (2011): Grundlagen Qualitätsmanagement, 3. Auflage, Verlag Oldenbourg

[updated 13.09.2018]

Data Science

Module name (EN): Data Science
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-141
Hours per semester week / Teaching method: 4V (4 hours per week)
ECTS credits: 6
Semester: 1
Mandatory course: yes
Language of instruction: German
Assessment: Written exam and project (90 minutes / Weighting 1:1 / Can be repeated semesterly) [updated 13.09.2018]
Curricular relevance: MASCM-141 Supply Chain Management, Master, ASPO 01.04.2017, semester 1, mandatory course
Workload: 60 class hours (= 45 clock hours) over a 15-week period. The total student study time is 180 hours (equivalent to 6 ECTS credits). There are therefore 135 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Stefan Selle
Lecturer: Prof. Dr. Stefan Selle [updated 26.04.2017]
Learning outcomes: After successfully completing this module, students will be able to: <ul style="list-style-type: none">- define and explain basic terms from the field of data science,- illustrate interrelationships in the field of data science,- understand and apply data modeling methods,- apply and evaluate analytical methods of data mining,- work in self-organized teams,- consolidate and present work results,- criticize and reflect upon project results. [updated 13.09.2018]

Module content:

Introduction

- Decisions, data, Business Intelligence (BI), Big Data
- Data protection, data security

Data Analyses

- ABC analysis
- Cost-utility analysis (CUA)
- Pivot analysis

Data Management

- Entity Relationship Modell (ERM)
- ACID principle
- Online Transaction Processing (OLTP)

Data Warehouse

- Dimensional modeling, star schema
- Extract Transform Load (ETL) process
- Online Analytical Processing (OLAP)

Data Mining

- Cross Industry Standard Process (CRISP) for Data Mining
- Supervised learning, cross-validation, leave-one-out
- Algorithms, heuristics

Classification

- Confusion matrix, Receiver Operating Curve (ROC)
- Naive Bayes, decision trees, Artificial Neural Networks (ANN)

Cluster Analyses

- Hierarchical methods
- k-means

Association Rule Learning

- Support, confidence, lift
- Apriori algorithm

Prognoses

- Linear regression, time series analysis, smoothing
- Stochastic processes, autoregressive processes

Text Mining

- Stemming, Bag-of-Words (BOW) model, Part-of-Speech (PoS) tagging
- Frequency analysis, sentiment analysis, tag cloud

Big Data

- 5 Vs, NoSQL, In-Memory
- Hadoop, MapReduce, Spark

[updated 13.09.2018]

Teaching methods/Media:

Lecture with practical exercises on the PC using MS Excel, MS Access, ARIS 9.8, SAP BW 7.4 and KNIME Analytics. Project work in self-organized teams.

[updated 13.09.2018]

Recommended or required reading:

Recommended reading:

[Introduction]

Müller, R.M.; Lenz, H.-J.: Business Intelligence, Springer Verlag, Berlin, 2013.

[Data analyses]

Wies, P.: Excel 2013 Fortgeschrittene Techniken, Herdt Verlag, Bodenheim, 2013.

[Data management]

Schicker, E.: Datenbanken und SQL, 4. Auflage, Springer Vieweg, Wiesbaden, 2014.

Swoboda, B.; Buhlert, S.: Access 2013 Grundlagen für Datenbankentwickler, Herdt Verlag, Bodenheim, 2013.

[Data warehouse]

Bauer, A., Günzel, H.: Data-Warehouse-Systeme, 3. Aufl., Dpunkt-Verlag, Heidelberg, 2008.

Inmon, W. H.: Building the Data Warehouse, John Wiley & Sons, New York, 1996.

Kimball, R.: The Data Warehouse Toolkit, John Wiley & Sons, New York, 1996.

[Data mining]

Aggarwal, C.C.: Data Mining _ The Textbook, Springer Verlag, Cham, 2015.

Ester, M., Sander, J.: Knowledge Discovery in Databases, Springer Verlag, Berlin, 2000.

Han, J., Kamber, M., Pei, J.: Data Mining, 3. Aufl., Morgan Kaufmann, Waltham, 2012.

Runkler, T.A.: Data Mining, Vieweg + Teubner, Wiesbaden, 2010.

Tan, P.-N., Steinbach, M., Kumar, V.: Introduction to Data Mining, Pearson, Boston, 2006.

Witten, I.H., Eibe, F., Hall, M.A.: Data Mining, 3. Aufl., Morgan Kaufmann, Burlington, 2011.

[Big data]

Dorschel, J.: Praxishandbuch Big Data, Springer Gabler Fachmedien, Wiesbaden, 2015.

[updated 13.09.2018]

International Supply Management

Module name (EN): International Supply Management
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-220
Hours per semester week / Teaching method: 4VU (4 hours per week)
ECTS credits: 6
Semester: 2
Mandatory course: yes
Language of instruction: English
Assessment: Written exam and composition with presentation (90 minutes / Weighting 1:1 / Can be repeated semesterly) [updated 13.09.2018]
Curricular relevance: MASCM-220 Supply Chain Management, Master, ASPO 01.04.2016, semester 2, mandatory course MASCM-220 Supply Chain Management, Master, ASPO 01.04.2017, semester 2, mandatory course
Workload: 60 class hours (= 45 clock hours) over a 15-week period. The total student study time is 180 hours (equivalent to 6 ECTS credits). There are therefore 135 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Thomas Korne
Lecturer: Prof. Dr. Thomas Korne [updated 01.04.2017]

Learning outcomes:

After successfully completing this module, students will:

_ have mastered the planning and conception of internationally oriented supply strategies used by industrial companies such as the supplier strategy, transport strategy and procurement market strategy and able to apply them using quantitative calculation methods to solve concrete case studies.

_ be able to list and explain the global interrelationships in current supply strategies,

_ be able to apply the knowledge acquired in this course to relevant problems in the field,

_ be able to assess and weigh up existing strategic alternatives using simulative and quantitative methods,

_ be able to present their knowledge in the form of a talk or a presentation and hold their own in a professional discussion.

[updated 13.09.2018]

Module content:

Elements and methods of strategic procurement management, as well as strategies for the internationalization of companies in the areas of production, logistics and procurement, lectures, case studies and independent work on an example case. The following core topics from the fields of materials management and purchasing will be discussed:

1. Importance of procurement and purchasing
2. Procurement process
3. Market structures
4. Procurement market research
5. Outsourcing and risk management
6. Sourcing strategies
7. Category sourcing
8. Special features of global procurement
9. Supplier evaluation
10. Supplier development
11. Pricing structures
12. Purchasing negotiations
13. Aspects of contract design
14. Business ethics and corporate social responsibility
15. E-procurement and IT in purchasing
16. Purchasing services
17. Purchasing organization

[updated 13.09.2018]

Teaching methods/Media:

Lecture and tutorial, as well as case study work in teams with subsequent presentations

[updated 13.09.2018]

Recommended or required reading:

- Arnolds, H. et al (2013): Materialwirtschaft und Einkauf, Grundlagen _ Spezialthemen _ Übungen, 12.Auflage, Springer Gabler Verlag, Wiesbaden (available as a electronic resource)
- Heß, G. (2008): Supply Strategien in Einkauf und Beschaffung _ Systematischer Ansatz und Praxisfälle, Gabler Verlag, Springer Fachmedien Wiesbaden GmbH (available as a electronic resource)
- Large, R. (2009): Strategisches Beschaffungsmanagement _ Eine praxisorientierte Einführung mit Fallstudien, 4.Auflage, Gabler Verlag, Wiesbaden (available as a electronic resource)
- Monczka, R.M. et al. (2010): Purchasing & Supply Chain Management, 4th edition, South-Western Cengage Learning, Andover/United Kingdom
- van Weele, A. J. (2010): Purchasing and Supply Chain Management, 5th edition, Cengage Learning, Andover/United Kingdom

[updated 13.09.2018]

Lean Production Concepts and Methods

Module name (EN): Lean Production Concepts and Methods
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-120
Hours per semester week / Teaching method: 4VU (4 hours per week)
ECTS credits: 6
Semester: 1
Mandatory course: yes
Language of instruction: German
Assessment: Oral examination und presentation (weighting 1:1 / can be repeated annually) [updated 13.09.2018]
Curricular relevance: DFMM-MASCM-120 Management Sciences, Master, ASPO 01.10.2018, semester 1, mandatory course MASCM-120 Supply Chain Management, Master, ASPO 01.04.2016, semester 1, mandatory course MASCM-120 Supply Chain Management, Master, ASPO 01.04.2017, semester 1, mandatory course
Workload: 60 class hours (= 45 clock hours) over a 15-week period. The total student study time is 180 hours (equivalent to 6 ECTS credits). There are therefore 135 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Steffen H. Hütter
Lecturer: Prof. Dr. Steffen H. Hütter [updated 01.04.2017]

Learning outcomes:

After successfully completing this module, students will:

_ be familiar with the most common concepts and methods for optimizing processes in production, logistics and procurement and be able to apply them to actual problems,
_ be able to analyze an exemplary process flow and quantitatively evaluate its potential for improvement using the concepts presented in the course, both qualitatively and using suitable key figures,

_ be able to apply the concepts and methods of Lean Management to any problem, for example to calculate a leveling scheme or the Overall Equipment Efficiency OEE,

_ be able to justify and explain their assessment and analysis results in a discussion.

[updated 13.09.2018]

Module content:

Optimization elements and methods such as Kaizen, Lean Management, CIP, Business Process Reengineering, 5S, leveling, cyclic material supply, PokaYoke, target development, Kanban etc., supplemented by the independent analysis of an exemplary case, if necessary also in cooperation with an industrial company with a practical problem of its own or the implementation of a business simulation in the logistics training laboratory.

[updated 13.09.2018]

Teaching methods/Media:

Lecture and tutorial, as well as independent work on case studies in teams (if necessary, in a company): eLearning content will also be used.

[updated 13.09.2018]

Recommended or required reading:

Alicke, K. (2005): Planung und Betrieb von Logistiknetzwerken: Unternehmensübergreifendes Supply Chain Management, 2. Aufl., Springer Verlag, Berlin

Corsten, H. (2007): Produktionswirtschaft, 11. Auflage, Wissenschaftsverlag, München Oldenburg

Dickmann, P. (2008): Schlanker Materialfluss: mit Lean Production, Kanban und Innovationen, 2., aktualisierte u. erw. Aufl., Springer

Kiener, S., Maier-Scheubeck, N., et al. (2009): Produktions-Management, 9. Auflage, München Oldenburg Wissenschaftsverlag

Pollitt, D. (1998): Supply Chain logistics in: International Journal of Physical Distribution & Logistics Management, Vol. 28 No. 3, pp. 181-200

Rother, Mike (2011): Sehen lernen: mit Wertstromdesign die Wertschöpfung erhöhen und Verschwendung beseitigen, Lean Management Institut, Mannheim

Töpfer, A. (2008): Lean Six Sigma: Erfolgreiche Kombination von Lean Management, Six Sigma und Design for Six Sigma, 1. Auflage, Springer Berlin Heidelberg

[updated 13.09.2018]

Logistics Seminar

Module name (EN): Logistics Seminar
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-110
Hours per semester week / Teaching method: 4S (4 hours per week)
ECTS credits: 6
Semester: 1
Mandatory course: yes
Language of instruction: German
Assessment: Term paper with presentation (can be repeated annually) [updated 13.09.2018]
Curricular relevance: MASCM-110 Supply Chain Management, Master, ASPO 01.04.2016, semester 1, mandatory course MASCM-110 Supply Chain Management, Master, ASPO 01.04.2017, semester 1, mandatory course
Workload: 60 class hours (= 45 clock hours) over a 15-week period. The total student study time is 180 hours (equivalent to 6 ECTS credits). There are therefore 135 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Thomas Bousonville
Lecturer: Prof. Dr. Thomas Bousonville [updated 01.04.2017]
Learning outcomes: After successfully completing this module, students will be able to: _ independently find and evaluate specialized literature on a selected topic, _ independently summarize and evaluate the above mentioned sources, _ write a scientific term paper based on the above, _ present the knowledge they have gained in a presentation and _ be able to conduct a discussion of their results. [updated 13.09.2018]

Module content:

Independent analysis and presentation of a selected problem in logistics, i.e.

- narrowing down their topic,
- collecting and evaluating the material they find,
- writing a term paper in compliance with scientific standards (e.g. use of verified sources, comprehensible reasoning, reference to current knowledge/theories, independent results)
- Target group-oriented presentation
- Participation in discussions about the other presentations

[updated 13.09.2018]

Teaching methods/Media:

Feedback on first drafts, written term paper and presentation; use of word processing and presentation software

[updated 13.09.2018]

Recommended or required reading:

Ebster, C./Stalzer, L.: Wissenschaftliches Arbeiten für Wirtschafts- und Sozialwissenschaftler, aktuellste Aufl., UTB Verlag, Wien.

Theisen, Manuel R.: Wissenschaftliches Arbeiten. Technik, Methodik, Form, aktuellste Aufl., Verlag Vahlen, München

[updated 13.09.2018]

Master's Colloquium

Module name (EN): Master´s Colloquium
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-320
Hours per semester week / Teaching method: 2S (2 hours per week)
ECTS credits: 2
Semester: 3
Mandatory course: yes
Language of instruction: English/German
Assessment: Presentation (can be repeated semesterly) [updated 13.09.2018]
Curricular relevance: MASCM-320 Supply Chain Management, Master, ASPO 01.04.2016, semester 3, mandatory course MASCM-320 Supply Chain Management, Master, ASPO 01.04.2017, semester 3, mandatory course
Workload: 30 class hours (= 22.5 clock hours) over a 15-week period. The total student study time is 60 hours (equivalent to 2 ECTS credits). There are therefore 37.5 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Teresa Melo
Lecturer: Prof. Dr. Teresa Melo [updated 01.04.2017]

Learning outcomes:

After successfully completing this module, students will be able to:

- _ combine their findings from theory and practice in a solution-oriented way,
 - _ present the core elements of their Master´s thesis and justify their approach and methodology in front of a critical audience,
 - _ discuss the results of their Master´s thesis critically,

 - _ formulate the findings of their work with regard to its implications for companies and, if necessary, for further research,
 - _ participate in a scientific, as well as a practice-oriented expert discussion in the field of Supply Chain Management.
- Within the framework of the Master´s Colloquium (block seminar), students will present the topic, their approach and methodology, as well as the results - if available - of their Master´s thesis and discuss these critically, in particular with regard to the limits of their own work.

[updated 13.09.2018]

Module content:

[still undocumented]

Teaching methods/Media:

Seminar with presentations and discussions.

[updated 13.09.2018]

Recommended or required reading:

Depends on the topic of the Master´s thesis.

[updated 13.09.2018]

Master's Thesis

Module name (EN): Master´s Thesis
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-310
Hours per semester week / Teaching method: -
ECTS credits: 22
Semester: 3
Mandatory course: yes
Language of instruction: English/German
Assessment: Master´s thesis (can be repeated semesterly) [updated 13.09.2018]
Curricular relevance: MASCM-310 Supply Chain Management, Master, ASPO 01.04.2016, semester 3, mandatory course MASCM-310 Supply Chain Management, Master, ASPO 01.04.2017, semester 3, mandatory course
Workload: The total student study time for this course is 660 hours.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Teresa Melo
Lecturer: Prof. Dr. Teresa Melo [updated 01.04.2017]

Learning outcomes:

After successfully completing this module, students will be able to:

- _ independently create a scientific work on a chosen or given topic within a given time,
- _ scientifically evaluate and reflect on well-known contributions on their topic,

- _ develop their own research approaches and suitable solutions,
- _ while formulating correct working hypotheses,
- _ apply the theoretical, methodological and argumentative competence acquired during their studies,
- _ analyze complex issues and describe and evaluate correct economic terminology,
- _ present their results precisely and in a scientific manner,

- _ work on a practice-oriented or theoretical topic in a structured manner and document the results scientifically in the form of a Master's thesis.

The Master's thesis must refer to relevant, subject-related course content that will be coordinated between the student and his/her supervisor.

[updated 13.09.2018]

Module content:

Thematically, it can refer to a practical problem (in cooperation with a company or institution) or a theoretical problem (e.g. in cooperation with a research institution). Students are given 20 weeks to write their thesis.

[updated 13.09.2018]

Teaching methods/Media:

Written thesis

[updated 13.09.2018]

Recommended or required reading:

Depends on the respective topic

[updated 13.09.2018]

Study Project

Module name (EN): Study Project
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-230
Hours per semester week / Teaching method: 4PA (4 hours per week)
ECTS credits: 6
Semester: 2
Mandatory course: yes
Language of instruction: English/German
Assessment: Term paper with presentation (can be repeated annually) [updated 13.09.2018]
Curricular relevance: MASCM-230 Supply Chain Management, Master, ASPO 01.04.2016, semester 2, mandatory course MASCM-230 Supply Chain Management, Master, ASPO 01.04.2017, semester 2, mandatory course
Workload: 60 class hours (= 45 clock hours) over a 15-week period. The total student study time is 180 hours (equivalent to 6 ECTS credits). There are therefore 135 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Thomas Bousonville
Lecturer: Prof. Dr. Thomas Bousonville [updated 01.04.2017]

Learning outcomes:

After successfully completing this module, students will be able to:

- _ analyze a complex task or problem taken from operational practice and create a project plan (work packages, schedule) for dealing with the question,
- _ identify and document the professional requirements of the project,

- _ organize and delegate tasks logically within a project team and contribute to the overall success of the project,
- _ meet deadlines and communicate problems or discrepancies resulting from the time and work schedule,

- _ summarize and prepare their work for presentation in a results-oriented manner, present it freely and explain it in detail if required, and
- _ document their results in a well-structured manner in a written project report.

[updated 13.09.2018]

Module content:

Students will learn to deal with current supply chain management problems independently using the knowledge and skills acquired in the specialized modules of the degree program. Project selection and work usually takes place in cooperation with a company.

- Project kick-off event to get to know the participants and define project goals
- Project planning (time, factual, personnel)
- Project execution in a team (incl. internal/external communication, e.g. with the client)
- Interim and final presentation
- Project follow-up (preparation of a project report in compliance with scientific criteria).

[updated 13.09.2018]

Teaching methods/Media:

Project work in groups, feedback discussions on content and organization with lecturers and external project participants, presentation techniques

[updated 13.09.2018]

Recommended or required reading:

Felkai, R.; Beiderwieden, A.: Projektmanagement für technische Projekte, Vieweg + Teubner, Wiesbaden, latest edition

Westermann, R.; Kraus, G.: Projektmanagement mit System, Gabler, Wiesbaden, latest edition

Further literature will be compiled on a project-by-project basis

[updated 13.09.2018]

Supply Chain Planning

Module name (EN): Supply Chain Planning
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-210
Hours per semester week / Teaching method: 4VU (4 hours per week)
ECTS credits: 6
Semester: 2
Mandatory course: yes
Language of instruction: English
Assessment: Written exam and composition with presentation (60 minutes / Weighting 1:2 / Can be repeated semesterly) [updated 13.09.2018]
Curricular relevance: DFMM-MASCM-210 Management Sciences, Master, ASPO 01.10.2018, semester 1, mandatory course MASCM-210 Supply Chain Management, Master, ASPO 01.04.2016, semester 2, mandatory course MASCM-210 Supply Chain Management, Master, ASPO 01.04.2017, semester 2, mandatory course
Workload: 60 class hours (= 45 clock hours) over a 15-week period. The total student study time is 180 hours (equivalent to 6 ECTS credits). There are therefore 135 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Thomas Bousonville
Lecturer: Prof. Dr. Thomas Bousonville [updated 01.04.2017]

Learning outcomes:

After having successfully completed this module, the student will be able to:

- _ explain a framework of the strategic, tactical and operational planning tasks inherent to modern supply chain management,
- _ describe the demand planning process, select appropriate forecasting techniques and interpret the results,
- _ set up quantitative models for aggregated planning decisions and use computer tools to solve them,
- _ assess decisions about the centralization of inventories in a single stage supply chain,
- _ apply strategies for positioning inventories along different stages of a multi-echelon supply chain,
- _ name criteria that impact the design of today´s global production and distribution (and reverse logistics) networks and use models to make a cost-based evaluation of different network options,
- _ name the major players in retail supply chains and describe concepts that support the integration of retailers and consumer goods manufacturers to improve overall SC performance.

[updated 13.09.2018]

Module content:

1. Introduction to planning tasks along the supply chain
 - 1.1 Why decision-oriented supply chain management matters
 - 1.2 The supply chain planning matrix
 - 1.3 Postponement and optimal product availability
2. Demand planning
 - 2.1 The demand planning process: steps, stakeholders, objectives
 - 2.2 Types of forecasting techniques
 - 2.3 Time series forecasting: scope of application, error measures for quality assessment
3. Aggregated planning
 - 3.1 Objectives and the process in aggregated planning
 - 3.2 Level and chase strategy
 - 3.3 Decision models for mid-term capacity planning
4. Inventory management in supply chains
 - 4.1 Centralization of inventories in single-echelon supply chains
 - 4.2 Inventory positioning in multi-echelon supply chains
5. Supply chain design
 - 5.1 Globalization and international production networks
 - 5.2 Quantitative and qualitative criteria for production network reconfiguration
 - 5.3 Models and methods for production network reconfiguration
6. SCM in retailing and the consumer goods industry
 - 6.1 The relationship between consumer goods producers and retailers
 - 6.2 Efficient Consumer Response (ECR) and Vendor Managed Inventories
 - 6.3 Process cost perspective on retailing supply chains

[updated 13.09.2018]

Teaching methods/Media:

Lecture, case studies und exercises on the computer, field trip

[updated 13.09.2018]

Recommended or required reading:

Chopra, Sunil/Meindl, Peter: Supply Chain Management. Latest ed., Upper Saddle River, NJ

Stadtler, H., Kilger, C.: Supply Chain Management and Advanced Planning, Latest ed., Berlin, Heidelberg

Simchi-Levi, D., Kaminsky, P., Simchi-Levi, E.: Designing and Managing the Supply Chain: Concepts, Strategies and Case Studies, Latest ed., McGraw-Hill, Boston

Stadtler, H./Kilger, Ch. (ed.): Supply Chain Management and Advanced Planning. Concepts, Models, Software and Case Studies, Latest ed., Springer, Berlin

[*updated 13.09.2018*]

Supply Chain Management Master - optional courses

Academic Communication

Module name (EN): Academic Communication
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-510
Hours per semester week / Teaching method: 4V (4 hours per week)
ECTS credits: 6
Semester: according to optional course list
Mandatory course: no
Language of instruction: English
Assessment: Written exam + term paper with presentation (90 minutes / Weighting 1:1 / Can be repeated semesterly) [updated 13.09.2018]
Curricular relevance: MAMS-510 Marketing Science, Master, ASPO 01.04.2016, optional course MARPF-510 Accounting and Finance, Master, ASPO 01.04.2016, optional course MASCM-510 Supply Chain Management, Master, ASPO 01.04.2016, optional course MASCM-510 Supply Chain Management, Master, ASPO 01.04.2017, optional course
Workload: 60 class hours (= 45 clock hours) over a 15-week period. The total student study time is 180 hours (equivalent to 6 ECTS credits). There are therefore 135 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Thomas Tinnefeld
Lecturer: Prof. Dr. Thomas Tinnefeld [updated 01.04.2017]

Learning outcomes:

- After successfully completing this course, students will have improved their use of academically relevant decoding strategies and reading techniques.
- Students will be capable of reading and understanding study-relevant scientific literature.
- They will be able to produce short written scientific texts in a foreign language.
- Students will be able to understand English-language lectures on study-related topics.
- They will have perfected their use of presentation and argumentative techniques.
- In addition, they will be able to present specific scientific topics orally, while taking their audience into account.

[updated 13.09.2018]

Module content:

- (Short) introduction to working scientifically
- Development of vocabulary-based reading comprehension techniques (e.g. word families and word fields)
- Intratextual information research
- Scientific text types
- Strategies for textual planning
- Scientific citation methods
- Exercises for listening comprehension with an academic background
- Development of academic presentation techniques (including the necessary notation techniques)
- Academic discussions
- Multimedia language lab work
- Professionally relevant role playing and simulations

[updated 13.09.2018]

Teaching methods/Media:

- Use of free materials compiled by the lecturer (no textbooks)
- Listening comprehension texts (audio and/or video)
- Scientific texts (e.g. articles and excerpts from scientific monographs)
- Video material
- Internet resources
- Subject-related multimedia programs
- Supplementary materials on general and/or specialized vocabulary and grammar

[updated 13.09.2018]

Recommended or required reading:

[still undocumented]

Applied Business Ethics

Module name (EN): Applied Business Ethics
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-540
Hours per semester week / Teaching method: 4S (4 hours per week)
ECTS credits: 6
Semester: according to optional course list
Mandatory course: no
Language of instruction: German
Assessment: Term paper with presentation, course participation, compulsory attendance [updated 13.09.2018]
Curricular relevance: MAMS-540 Marketing Science, Master, ASPO 01.04.2016, optional course MARPF-540 Accounting and Finance, Master, ASPO 01.04.2016, optional course MASCM-540 Supply Chain Management, Master, ASPO 01.04.2016, optional course MASCM-540 Supply Chain Management, Master, ASPO 01.04.2017, optional course
Workload: 60 class hours (= 45 clock hours) over a 15-week period. The total student study time is 180 hours (equivalent to 6 ECTS credits). There are therefore 135 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Christian Conrad
Lecturer: Prof. Dr. Christian Conrad [updated 01.04.2017]

Learning outcomes:

The objective of this course is to enable students to recognize the productivity-enhancing effects of ethics in business and apply them in individual cases.

After successfully completing this module, students will be able to do the following:

1. Apply ethical behavior in group and role-playing games
 2. Explain the importance of ethics for companies and the economy based on individual cases.
 3. Identify, analyze and evaluate ethical behavior in concrete economic situations.
 4. Work independently on ethical problems in business and develop and present productivity-enhancing concepts.
- A. Ethics in economics

[updated 05.12.2019]

Module content:

The importance of ethics for economic development, analyzed on the basis of current case studies.

B. Ethics in companies

The importance of ethics for corporate development, analyzed on the basis of current case studies.

[updated 13.09.2018]

Teaching methods/Media:

Lecture by lecturer (supplementary)
Feedback on results via discussions
Self-reflection and _presentation
Group work
Independent study with required literature
Term paper with presentations by the participants

[updated 13.09.2018]

Recommended or required reading:

Business Ethics

- Conrad, Christian A.: Wirtschaftsethik, latest edition
- Conrad, Christian A.: Business Ethics, latest edition
- Dietzfelbinger, Daniel: Praxisleitfaden Unternehmensethik, Wiesbaden, latest edition
- Göbel, Elisabeth: Unternehmensethik, Grundlagen und praktische Umsetzung, Stuttgart 2010

- Noll, Bernd: Grundriss der Wirtschaftsethik, Stuttgart latest edition

[updated 05.12.2019]

Business English II

Module name (EN): Business English II
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-512
Hours per semester week / Teaching method: 4V (4 hours per week)
ECTS credits: 6
Semester: according to optional course list
Mandatory course: no
Language of instruction: English
Assessment: Written exam and term paper with presentation (90 minutes / weighting 1:1 / can be repeated semesterly) [updated 20.11.2019]
Curricular relevance: MAMS-512 Marketing Science, Master, ASPO 01.04.2016, optional course MARPF-512 Accounting and Finance, Master, ASPO 01.04.2016, optional course MASCM-512 Supply Chain Management, Master, ASPO 01.04.2016, optional course MASCM-512 Supply Chain Management, Master, ASPO 01.04.2017, optional course
Workload: 60 class hours (= 45 clock hours) over a 15-week period. The total student study time is 180 hours (equivalent to 6 ECTS credits). There are therefore 135 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Thomas Tinnefeld
Lecturer: Prof. Dr. Thomas Tinnefeld [updated 01.04.2017]

Learning outcomes:

- After successfully completing this module, students will have perfected the four skills of language learning based on topics from their everyday life, studies and work environments.
-
- They will have developed their skills in technical/specialized English.
- Students will be aware of and sensitive to the problems and central issues in the politics and economics of the English-speaking world.
- They will have developed their intercultural communication skills and perfected their foreign language presentation skills.
- Students will have improved their foreign language teamwork and project skills.
-

[updated 05.12.2019]

Module content:

- Reading and listening comprehension texts for intermediate language skills
- Special types of written texts in the foreign language (e.g. commercial correspondence, e-mails, memos, curriculum vitae)
- Subject-related oral texts (e.g. telephone conversations, short reports, negotiations)
- Dealing with economic and legal issues based on subject-related, specialized events during the current the semester
- Vocabulary and grammar work
- Multimedia language lab
- Job-related role playing and simulations; case studies
- Creation of subject-related, specialized presentations
- Intercultural negotiation strategies

[updated 05.12.2019]

Teaching methods/Media:

- Presentations by the lecturer
- Plenary discussions
- Group discussions
- Partner work
- Group work phases where students tackle specific tasks
-
- Multimedia language lab
- Student presentations
- Short talks by the students
- Internet research

[updated 13.09.2018]

Recommended or required reading:

- Use of free materials compiled by the lecturer (no textbooks)
- Listening comprehension texts (audio and/or video)
- Newspaper and magazine articles from the English press (e.g. Time, Newsweek, The Times, The Guardian)
- Job-related English case studies;
- Internet resources
- Subject-related multimedia programs
- Supplementary materials on general and/or specialized vocabulary and grammar

[updated 13.09.2018]

Business French - Language and Intercultural Communication

Module name (EN): Business French - Language and Intercultural Communication
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-514
Hours per semester week / Teaching method: 4V (4 hours per week)
ECTS credits: 6
Semester: according to optional course list
Mandatory course: no
Language of instruction: French
Assessment: Written exam (90 minutes), term paper and presentation (weighting 1:1) [updated 13.09.2018]
Curricular relevance: MAMS-514 Marketing Science, Master, ASPO 01.04.2016, optional course MARPF-514 Accounting and Finance, Master, ASPO 01.04.2016, optional course MASCM-514 Supply Chain Management, Master, ASPO 01.04.2016, optional course MASCM-514 Supply Chain Management, Master, ASPO 01.04.2017, optional course
Workload: 60 class hours (= 45 clock hours) over a 15-week period. The total student study time is 180 hours (equivalent to 6 ECTS credits). There are therefore 135 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Thomas Tinnefeld
Lecturer: Prof. Dr. Thomas Tinnefeld [updated 01.04.2017]

Learning outcomes:

After successfully completing this module, students will:

- have attained language skills at the B1 intermediate level of the Common European Framework of Reference for Languages (CEFR),
- be able to understand basic and detailed information in intermediate general language and business French texts
-
- be able to follow intermediate-level conversations in their own area of expertise and deal with specific communicative experiences in French business life in a receptive manner,
-
- be able to communicate with native speakers using the linguistic means at their disposal in such a way that they can communicate successfully in general language and business-oriented conversations,
-
- be able to express themselves in writing on general language and selected specialized language topics in a largely comprehensible and communicative manner,
-
- be able to give professionally and technically-oriented presentations and create the corresponding written materials in a linguistically appropriate manner,
-
- have mastered the grammar relevant for the above skills, the basic general vocabulary, parts of the advanced French vocabulary and some French business vocabulary,
-
- be sensitive to the intercultural characteristics of countries belonging to the francophone world and thus, be able to successfully manage important communication situations in daily (business) life and
-
- be capable of embracing the intercultural differences of countries belonging to the francophone world and verbally interact there, to a large extent, successfully.
- Reading and listening comprehension texts at intermediate level

[updated 05.12.2019]

Module content:

- Texts for listening comprehension
- Production of relevant written French texts (e.g. business correspondence, e-mails, memos, curriculum vitae and letters of motivation)
- Production of relevant oral French texts (e.g. telephone conversations, short reports and negotiations with a relatively narrow thematic focus)
- Dealing with economic and business issues
- Vocabulary work and specialized grammar
- Multimedia language lab
- Role playing and simulations with reference to business life
- Creation of subject-related, specialized presentations
- Awareness of interculturally relevant contexts in the French-speaking world (both everyday life and work)
- Introduction to interculturally-oriented negotiation strategies

[updated 05.12.2019]

Teaching methods/Media:

- Presentations by the lecturer
- Plenary discussions
- Group discussions
- Partner work
- Group work phases where students tackle specific tasks
- Multimedia language lab

- Student presentations
- Short talks by the students
- Internet research

[updated 13.09.2018]

Recommended or required reading:

- Use of free materials compiled by the lecturer (no textbooks)
- Listening comprehension texts (audio and/or video)
- Internet resources
- Supplementary materials on general and/or specialized vocabulary and grammar

[updated 13.09.2018]

Business Simulation Game

Module name (EN): Business Simulation Game
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-582
Hours per semester week / Teaching method: 4S (4 hours per week)
ECTS credits: 6
Semester: according to optional course list
Mandatory course: no
Language of instruction: German
Assessment: Term paper with presentation [updated 13.09.2018]
Curricular relevance: MAMS-582 Marketing Science, Master, ASPO 01.04.2016, optional course MARPF-582 Accounting and Finance, Master, ASPO 01.04.2016, optional course MASCM-582 Supply Chain Management, Master, ASPO 01.04.2016, optional course MASCM-582 Supply Chain Management, Master, ASPO 01.04.2017, optional course
Workload: 60 class hours (= 45 clock hours) over a 15-week period. The total student study time is 180 hours (equivalent to 6 ECTS credits). There are therefore 135 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Jochen Pilhofer
Lecturer: Prof. Dr. Jochen Pilhofer [updated 01.04.2017]

Learning outcomes:

After successfully completing this module, students will have learned skills that are indispensable for an entrepreneur or entrepreneurial manager according to Thomson. This includes skills for risk/crisis management and decision making under pressure. In the first business simulation, students will create a business plan using market data and head-up a company in its start-up phase.

In the second business simulation, students will develop internationalization strategies for an established company.

Both business simulation games will be based on a computer-aided simulation.

Team participants must make their own market decisions in the periods between the mandatory sessions. In doing so, they will deepen their knowledge and practical skills with regard to decision theory.

[updated 05.12.2019]

Module content:**Part A: Topsim StartUp:**

- _ Testing ideas: demand potential, target groups, positioning, competitive advantages, product life cycle
- _ Creating a business plan using a business plan wizard
- _ Founding a company and related constitutive decisions: borrowing money, purchasing/renting buildings, hiring and training staff
- _ Market entry: a real competitive situation, customer groups, product awareness, capacity utilization, cost and revenue structure
- _ Presentation for investors

Part B: Topsim Going Global

- _ Strategies and challenges for expansion into new markets worldwide
- _ Defending your own market
- _ Analyzing the potential of different economic regions
- _ Penetrating other markets: evaluating chances and risks
- _ Understanding and adapting to culture-specific customer requirements
- _ Global logistics: transport routes and costs
- _ Thinking in business alternatives
- _ Strategic sales and production alternatives
- _ Analysis and targeted use of market barriers

[updated 05.12.2019]

Teaching methods/Media:

Seminar (partly as a block course, partly during the semester)

Computer-based business simulation game, laptops will be provided. Presentations and company decisions will take place during periods of mandatory attendance. After the seminar, groups will cooperate to write a term paper.

[updated 13.09.2018]

Recommended or required reading:

Manuals and background information will be handed out to the participants before the course begins.

[updated 13.09.2018]

Competition, Strategy & Innovation

Module name (EN): Competition, Strategy & Innovation
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-580
Hours per semester week / Teaching method: 4V (4 hours per week)
ECTS credits: 6
Semester: according to optional course list
Mandatory course: no
Language of instruction: German
Assessment: Term paper and presentation [updated 13.09.2018]
Curricular relevance: MAMS-580 Marketing Science, Master, ASPO 01.04.2016, optional course MARPF-580 Accounting and Finance, Master, ASPO 01.04.2016, optional course MASCM-580 Supply Chain Management, Master, ASPO 01.04.2016, optional course MASCM-580 Supply Chain Management, Master, ASPO 01.04.2017, optional course
Workload: 60 class hours (= 45 clock hours) over a 15-week period. The total student study time is 180 hours (equivalent to 6 ECTS credits). There are therefore 135 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Markus Münter
Lecturer: Prof. Dr. Markus Münter [updated 01.04.2017]

Learning outcomes:

After successfully completing this module, students will:

- be able to describe the interplay of competition, strategy and innovation and, based on this, analyze case studies and evaluate and develop corporate strategies,
- be able to analyze the long-term development of industries, market structure in conjunction with innovation dynamics and business models in different industries,
- be able to evaluate behavioral strategy and the implications for strategy development,
- be able to explain strategic competition and the establishment of competitive advantages based on game theoretical considerations,
- be able to analyze the implications of M&A and corporate development on market structure and corporate success.

[updated 13.09.2018]

Module content:

- Industrial evolution and technological regimes
- Innovation dynamics, new business models and entrepreneurship
- Innovations and R&D strategies
- Company-specific skills and the development of the market structure
- Behavioral strategy and implications for developing strategies
- Review of game theory results based on experiments on strategy and competitive behavior
- Competition in network industries
- Game theory analysis of the effect of M&A on company success and market structure

[updated 13.09.2018]

Teaching methods/Media:

Lecture with focus on case studies, experiments, the development of frameworks.

[updated 13.09.2018]

Recommended or required reading:

- Besanko, D., Dranove, D., Shanley, M and Schaefer, S., Economics of strategy, New York 2013.
- Belleflamme, P. and Peitz, M., Industrial organization: market and strategies, Cambridge 2010.
- Tremblay, V.J. and Tremblay, C.H., New perspectives on industrial organization, New York 2012.
- Magretta, J., Why business models matter, Harvard Business Review, May 2002.
- Teece, D.J., Business models, business strategy and innovation, Long Range Planning, 43, 2010, 172-194.
- Armstrong, M. and Huck, S., Behavioral economics as applied to firms _ a primer, Competition Policy International, 6, 2010, 3-45.
- Garbuio, M. et al., Behavioral economics and strategic decision making, The Oxford Handbook of Managerial Economics, Boston-London, 2014.
- Powell, TC., Lovallo, D., and Fox, C.R., Behavioral strategy, Strategic Management Journal, 2011, 32, 1369-1386.

[updated 13.09.2018]

Digitization in Finance and Accounting

Module name (EN): Digitization in Finance and Accounting
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-574
Hours per semester week / Teaching method: 4V (4 hours per week)
ECTS credits: 6
Semester: according to optional course list
Mandatory course: no
Language of instruction: German
Assessment: Written exam (90 minutes / can be repeated semesterly) [updated 20.11.2019]
Curricular relevance: MAMS-574 Marketing Science, Master, ASPO 01.04.2016, optional course MARPF-574 Accounting and Finance, Master, ASPO 01.04.2016, optional course MASCM-574 Supply Chain Management, Master, ASPO 01.04.2017, optional course
Workload: 60 class hours (= 45 clock hours) over a 15-week period. The total student study time is 180 hours (equivalent to 6 ECTS credits). There are therefore 135 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Christoph Freichel
Lecturer: Prof. Dr. Christoph Freichel [updated 05.04.2019]

Learning outcomes:

After successfully completing this module, students will be able to:

- understand and use the term digitization, assess the relevant opportunities and risks and classify its significance for finance and accounting,
- explain current developments and trends with regard to applicable practice-relevant tools in finance and accounting,
- understand the GoBD (Grundsätze zur ordnungsmäßigen Führung und Aufbewahrung von Büchern, Aufzeichnungen und Unterlagen in elektronischer Form sowie zum Datenzugriff) and assess its relevance,
- deal with problems, e.g. susceptibility to fraud, using of digital tools,
- assess the influence of digital tools on the preparation of bookkeeping, as well as individual or consolidated financial statements and understand some of the software applications that can be used for this,
- recognize the influence digitization can have on an auditor's work and which IT-supported tools should be used for specific test fields,
- describe how mass data in finance and accounting is analyzed (final analysis and simulation) and can be used for data and risk analysis purposes,
- evaluate the benefits of using digital tools to provide decision-relevant information for management.

[updated 20.11.2019]

Module content:

- I. Introduction to digitization in finance and accounting
- II. Digitization approaches in bookkeeping and document management
- III. Digitization options for the preparation of annual financial statements
- IV. Final analyses with the help of digital tools (simulation)
- V. Mass data evaluation (BigData in finance and accounting) _ Data and risk analyses
- VI. Digitized annual audit
- VII. Digitization tendencies in consolidated accounting

[updated 20.11.2019]

Teaching methods/Media:

Lecture and exercises

[updated 20.11.2019]

Recommended or required reading:

Greulich, S./Riepolt, J.: Digitalisierung von Geschäftsprozessen im Rechnungswesen, Nürnberg, latest edition.

Kischporski, M.: Elektronischer Rechnungsdatenaustausch mit E-Invoicing, Köln, latest edition.

Mindermann, T./Brösel, G.: Buchführung und Jahresabschlusserstellung nach HGB, Berlin, latest edition.

Schildbach, T./Stobbe, T./Freichel, C./Hamacher, K.: Der handelsrechtliche Jahresabschluss, Sternenfels, latest edition.

Brösel, G./Freichel, C./Toll, M./Buchner, R.: wirtschaftliches Prüfungswesen, München, latest edition.

Küting, K./Weber, C.-P.: Der Konzernabschluss: Praxis der Konzernrechnungslegung nach HGB und IFRS, Stuttgart, latest edition.

Suden P.: Die elektronische Rechnung in Handels- und Steuerrecht, Wiesbaden, latest edition.

[updated 20.11.2019]

European Spring Academy

Module name (EN): European Spring Academy
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-584
Hours per semester week / Teaching method: 4SU (4 hours per week)
ECTS credits: 6
Semester: according to optional course list
Mandatory course: no
Language of instruction: German
Assessment: Term paper with presentation [updated 13.09.2018]
Curricular relevance: DFMMS151 Management Sciences, Master, ASPO 01.10.2013, semester 1, optional course, management, course inactive since 04.11.2019 MKM-417 Cultural Management, Master, ASPO 01.10.2015, optional course, management MKM-417 Cultural Management, Master, ASPO 01.10.2016, semester 4, optional course, management MAMS-584 Marketing Science, Master, ASPO 01.04.2016, optional course, management MARPF-584 Accounting and Finance, Master, ASPO 01.04.2016, optional course, management MASCM-584 Supply Chain Management, Master, ASPO 01.04.2016, optional course, management MASCM-584 Supply Chain Management, Master, ASPO 01.04.2017, optional course, management WIMAScWPF-FÜ5 Industrial Engineering, Master, ASPO 01.10.2014, optional course, management, course inactive since 21.01.2020
Workload: 60 class hours (= 45 clock hours) over a 15-week period. The total student study time is 180 hours (equivalent to 6 ECTS credits). There are therefore 135 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Stefanie Jensen
Lecturer: Prof. Dr. Stefanie Jensen [updated 01.04.2017]

Learning outcomes:

The European Union is one of the top players in the international economy in terms of economic strength, production, export and import volumes and population. European countries are transferring more and more competences to the EU in many important policy areas, from jurisdiction and economic policy to consumer and environmental protection. But how does the EU work? How do regulations come about and how are they implemented? What can the EU institutions do about national governments and their interests? These are only a few of the questions that this interactive workshop will provide an answer to. In it, htw students will work together with students from our partner university Westminster College in Salt Lake City/Utah, USA.

After successfully completing this module, students will be able to:

- understand the process from the foundation of the EU to the present day, reflect on the importance of the EU for the national governments of Europe and understand the work of central European institutions.
- understand and reflect on the EU 's position on selected topics such as the financial crisis, external and economic relations, energy and climate policy, legal issues and the difficulty of joint decision-making.
- understand the cultural diversity of Europe.
- work in mixed groups with American students.

[updated 13.09.2018]

Module content:

- Current European issues (e.g. debt crisis with a country perspective, economic policy, external economic relations (e.g. with the USA: TTIP), foreign policy, environmental policy, consumer protection, refugees)
- Workings and derivation of European integration and central European institutions
- Overview of European cultures
- Creation of a term paper and presentation in English on a specific topic
- Intercultural communication skills and their use when working in a team

[updated 13.09.2018]

Teaching methods/Media:

Lectures/talks, interactive workshops, group work, exchange with American students, sightseeing, term paper with presentation

[updated 13.09.2018]

Recommended or required reading:

To be announced.

[updated 13.09.2018]

Financial Communication and Balance Sheet Analysis

Module name (EN): Financial Communication and Balance Sheet Analysis
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-570
Hours per semester week / Teaching method: 4V (4 hours per week)
ECTS credits: 6
Semester: according to optional course list
Mandatory course: no
Language of instruction: German
Assessment: Written exam (90 minutes / can be repeated semesterly) [updated 13.09.2018]
Curricular relevance: MAMS-570 Marketing Science, Master, ASPO 01.04.2016, optional course MARPF-570 Accounting and Finance, Master, ASPO 01.04.2016, optional course MASCM-570 Supply Chain Management, Master, ASPO 01.04.2016, optional course MASCM-570 Supply Chain Management, Master, ASPO 01.04.2017, optional course
Workload: 60 class hours (= 45 clock hours) over a 15-week period. The total student study time is 180 hours (equivalent to 6 ECTS credits). There are therefore 135 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Jochen Pilhofer
Lecturer: Prof. Dr. Jochen Pilhofer [updated 01.04.2017]

Learning outcomes:

After successfully completing this module, students will:

- be familiar with the basic conceptual features of a qualified balance sheet analysis (HGB/IFRS) and understand the interrelationships between the balance sheet, income statement and cash flow statement;
 - be able to independently analyze financial statements in accordance with International Financial Reporting Standards (IFRS) or national accounting law (HGB);
 - be familiar with the essential instruments of (traditional) balance sheet analysis and financial communication and be able to apply these to practical problems;
 - be familiar with different balance sheet policy design and discretionary options and can apply these to practice-related issues depending on management objectives;
 - be able to apply their knowledge to practical problems, e.g. in the form of exercises and case studies;
 - be able to deal with a given challenge or task in the fields of financial market communication and balance sheet analysis within a given period of time;
 - be able to assess subject-relevant problems analytically and recognize complex interrelationships;
 - be able to apply scientific-theoretical findings to practical questions.
- Principles of financial communication

[updated 13.09.2018]

Module content:

Review and analysis of financial key figures typically important in financial communication (including _non-GAAP measures_, preparation measures, traditional key figure analysis, stakeholders, relevant parameters, balance sheet policy, covenants)

Cash flow statement

Annex/management report (inkl. segment reporting)

Case studies/practical examples

[updated 13.09.2018]

Teaching methods/Media:

Lecture and tutorial

[updated 13.09.2018]

Recommended or required reading:

Küting/Weber, Die Bilanzanalyse, Stuttgart (Schaeffer-Poeschel-Verlag)

Baetge/Kirsch/Thiele, Bilanzanalyse, Düsseldorf (IDW-Verlag)

Gräfer et al., Bilanzanalyse, Herne (NWB-Verlag)

Brösel, Bilanzanalyse, Berlin (Erich Schmidt Verlag)

(always the newest edition)

[*updated 13.09.2018*]

Green Economy

Module name (EN): Green Economy
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-555
Hours per semester week / Teaching method: 4VF (4 hours per week)
ECTS credits: 6
Semester: according to optional course list
Mandatory course: no
Language of instruction: German
Assessment: Written exam and written composition [updated 21.06.2021]
Curricular relevance: MARPF-555 Accounting and Finance, Master, ASPO 01.04.2016, optional course, general subject MASCM-555 Supply Chain Management, Master, ASPO 01.04.2017, optional course, general subject WIMAScWPF-W21 Industrial Engineering, Master, ASPO 01.10.2014, optional course, general subject
Workload: 60 class hours (= 45 clock hours) over a 15-week period. The total student study time is 180 hours (equivalent to 6 ECTS credits). There are therefore 135 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Thomas Korne
Lecturer: Prof. Dr. Thomas Korne Prof. Dr. Uwe Leprich [updated 11.01.2021]

Learning outcomes:

After successfully completing this module, students will be able to:

- explain the driving forces behind the green transformation of the economy,
- assess products, services and business models with regard to the need for change and the opportunities offered by the green transformation,
- list the causes of major global, national, and regional environmental problems and assess their specific risks,
- derive basic environmental economic arguments and apply them to concrete environmental problems,
- classify current climate policy goals and challenges and transfer them to a corporate level of action,
- assess the sustainability requirements of financial markets and their stakeholders with regard to future investments and business models,
- apply basic tools for evaluating, analyzing and designing resource- and climate-friendly processes, services and products,
- identify and document the green transformation requirements for a concept, product, service, or business model,
- analyze and address a complex green transformation issue taken from the business world (Transformation Plan, Green Business Model Canvas),
- define a coherent division of labor within the framework of a project and to make an independent contribution to the overall success of the project,
- prepare the data from their work in a results-oriented manner, present it freely and explain it in detail when asked,
- document their findings in a structured manner in a short written report.

[updated 21.06.2021]

Module content:

- Green Business Model Canvas
- Sustainable innovation management
- Sustainability indicators (national, international, target matrix)
- Environmental problems and their causes / Planetary boundaries
- Goals of a green economy (global Sustainable Development Goals/SDGs, national sustainability indicators).
- Environmental economic approaches, concepts and instruments
- Climate crisis and climate protection as driving forces of a green economy: from the Paris Climate Agreement to the EU Green Deal and the carbon footprint for companies
- Circular economy as a driver of the green economy,- basics of analysis methods (LCA, maturity models), examples of tools and implementation.
- The green economy and its funding: Criteria, concepts and institutes
- Technology and innovation management in the context of a green economy
- Opportunities and approaches for green products, services and business models in the context of a green transformation
- Independent creation of a green business model or a green transformation project in the form of project work using the knowledge and skills acquired in the lecture.

[updated 21.06.2021]

Teaching methods/Media:

Lecture, discussions, case studies, project, presentations

[updated 21.06.2021]

Recommended or required reading:

- Boston Consulting Group/Prognos (2018): Klimapfade für Deutschland, Studie im Auftrag des Bundesverbands der Deutschen Industrie (BDI), Januar
- Bundesregierung: Deutsche Nachhaltigkeitsstrategie, Aktualisierung 2018
- Feess, Eberhard/Seeliger, Andreas (2013): Umweltökonomie und Umweltpolitik, München: Vahlen
- Intergovernmental Panel on Climate Change/IPCC (2014): Summary for Policymakers. In: Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change
- Lacy, P., Long, J., Spindler, W. (2020): The circular economy handbook: realizing the circular advantage, London: Palgrave Macmillan
- McKinnon, A. et al (2015): Green Logistics: Improving the environmental sustainability of logistics, 3rd edition, London: Kogan Page
- Osterwalder A., Pigneur, Y. (2010): Business model generation: a handbook for visionaries, game changers, and challengers, Hoboken, NJ: Wiley
- Rockström, Johan et. al. (2009): Planetary boundaries: exploring the safe operating space for humanity, in: Ecology and Society 14(2) (32), 58
- Schön, S. et al (2020): Transdisziplinäres Innovationsmanagement: Nachhaltigkeitsprojekte wirksam umsetzen, Bielefeld: wbv
- Statistisches Bundesamt/destatis (2018): Nachhaltige Entwicklung in Deutschland, Indikatorenbericht 2018, Wiesbaden

[updated 21.06.2021]

Local Urban Mobility and Logistics Optimization

Module name (EN): Local Urban Mobility and Logistics Optimization
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-553
Hours per semester week / Teaching method: 4S (4 hours per week)
ECTS credits: 6
Semester: according to optional course list
Mandatory course: no
Language of instruction: German
Assessment: Written composition with presentation (can be repeated semesterly) [updated 23.11.2020]
Curricular relevance: MASCM-553 Supply Chain Management, Master, ASPO 01.04.2017, optional course, general subject
Workload: 60 class hours (= 45 clock hours) over a 15-week period. The total student study time is 180 hours (equivalent to 6 ECTS credits). There are therefore 135 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Steffen H. Hütter
Lecturer: Prof. Dr. Steffen H. Hütter Lehrbeauftragte [updated 28.08.2020]

Learning outcomes:

After successfully completing this module, students will be able to:

- develop concepts and strategies using new digital business models to optimize individual mobility behavior through digital networking and new information technologies,
- plan test scenarios (intermodal trips) and optimize them in the course of a field study,
- conduct an empirical study and analysis of individual mobility behavior in local public transport (consumer behavior).
- develop and model key figures and criteria (KPIs) of individual mobility for mobility analyses using quantitative methods and approaches (Balance Scorecard or similar).

[updated 23.11.2020]

Module content:

Megatrends relating to sustainability, digitization, urbanization and even disruptive business models are increasingly influencing our society and forcing us to adopt new approaches and ways of thinking with regard to individual mobility behavior.

Demographic change and ensuring affordable mobility while taking into account higher requirements in terms of energy efficiency, resource conservation and CO2 reduction are just a few of the factors that must be taken into account when developing innovative mobility concepts.

It is therefore necessary to create new Smart Mobility Solutions (SMS) that integrate Mobility as a Service (MaaS) concepts and to align and develop new business models with the customer requirements of urban locations.

In this context, the intermodal traffic pattern plays a decisive role in individual mobility behavior.

[updated 23.11.2020]

Teaching methods/Media:

Seminar, project

[updated 23.11.2020]

Recommended or required reading:

Ahrens, G.-A. et al. (2013), Potenziale des Radverkehrs für den Klimaschutz, TU Dresden im Auftrag des Umweltbundesamtes

Behrend, M. / Meisel, F. (2017), Sharing Economy im Kontext urbaner Mobilität, in: Proff, H. / Fojcik, T. M. (Hrsg.), Innovative Produkte und Dienstleistungen in der Mobilität - Technische und betriebswirtschaftliche Aspekte, Wiesbaden: Springer, pp. 335-346.

BMVI - Bundesministerium für Verkehr und digitale Infrastruktur (2019), Deutsches Mobilitätspanel (MOP), Längsschnittstudie zum Mobilitätsverhalten der Bevölkerung, Jahresbericht 2017-2018.

BMVI - Bundesministerium für Verkehr und digitale Infrastruktur (2018), Mobilität in Deutschland (MID), Studie mit Fokus auf die tief differenzierten Auswertemöglichkeiten demografischer, sozioökonomischer und regionaler Mobilitätsmuster.

Chlond, B. (2013), Multimodalität und Intermodalität, in: Beckmann, K. / Klein-Hitpaß, A. (Hrsg.). Nicht weniger unterwegs, sondern intelligenter? Neue Mobilitätskonzepte. Deutsches Institut für Urbanistik (DifU), Edition Band 11, Berlin, pp. 271-293.

Deffner, J. / Hefter, T. / Götz, K. (2013), Multioptionalität auf dem Vormarsch? Veränderte

Mobilitätswünsche und technische Innovationen als neue Potenziale für einen multimodalen Öffentlichen Verkehr, in: Schwedes, O. (Hrsg.), Öffentliche Mobilität - Perspektiven für eine nachhaltige Verkehrsentwicklung, Wiesbaden: Springer, pp. 201-227.

Eryilmaz, E. et al. (2014), Collaborative Management of Intermodal Mobility, FZI Forschungszentrum Informatik, Karlsruher Institut für Technologie (KIT), Institut für Verkehrswesen.

Gebhardt, L. et al. (2016), Intermodal Urban Mobility: Users, Uses, and Use Cases, in: Transportation Research Procedia, Vol. 14, pp. 1183-1192.

Goletz, M. / Heinrichs, D. / Feige, I. (2016), Mobility Trends in cutting-edge cities, ifmo - Institut für Mobilitätsforschung, München.

Henkel, S. et al. (2015), Mobilität aus Kundensicht - Wie Kunden ihren Mobilitätsbedarf decken und über das Mobilitätsangebot denken, Wiesbaden: Springer.

ifmo - Institut für Mobilitätsforschung (Hrsg.) (2011), Mobilität junger Menschen im Wandel - multimodaler und weiblicher, München.

Jarass, J. / Oostendrop, R. (2017), Intermodal, urban, mobil - Charakterisierung intermodaler Wege und Nutzer am Beispiel Berlin, in: Raumforschung und Raumordnung 75, pp. 355-369.

Kagerbauer, M. et al. (2015), Intermodale Mobilität - Elektromobile Fahrzeugkonzepte als Zubringer zum Öffentlichen Verkehr, in: Proff, H. (Hrsg.), Entscheidungen beim Übergang in die Elektromobilität - Technische und betriebswirtschaftliche Aspekte, Wiesbaden: Springer, pp. 567-583.

Kindl, A. et al. (2018), Smart Station - Die Haltestelle als Einstieg in die multimodale Mobilität, Studie im Auftrag des Bundesministeriums für Verkehr und digitale Infrastruktur unter FE-Nr. 70.918/2016, Berlin.

Kuhnimhof, T. et al. (2019) - Veränderungen im Mobilitätsverhalten zur Förderung einer nachhaltigen Mobilität, Abschlussbericht Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR) im Auftrag des Umweltbundesamtes (Forschungskennzahl 3716581050, UBA-FB 002834), Texte 101/2019.

Nobis, C. (2013), Multimodale Vielfalt. Quantitative Analyse multimodalen Verkehrshandelns, Dissertation, Humboldt-Universität Berlin, Berlin.

Schönau, M. (2016), GPS-basierte Studien zur Analyse der nachhaltigen urbanen Individualmobilität, Dissertation, Universität Ulm, Ulm.

Wolter, S. (2012), Smart Mobility - Intelligente Vernetzung der Verkehrsangebote in Großstädten, veröffentlicht in: Zukünftige Entwicklungen in der Mobilität, pp. 527-548, Springer Fachmedien Wiesbaden.

Zumkeller, D. et al. (2005), Die intermodale Vernetzung von Personenverkehrsmitteln unter Berücksichtigung der Nutzenbedürfnisse (INVERMO), Schlussbericht der KIT, Karlsruhe.

[updated 23.11.2020]

Managing a Company Correctly: Legal Management

Module name (EN): Managing a Company Correctly: Legal Management
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-542
Hours per semester week / Teaching method: 4V (4 hours per week)
ECTS credits: 6
Semester: according to optional course list
Mandatory course: no
Language of instruction: German
Assessment: Oral examination [updated 13.09.2018]
Curricular relevance: MAMS-542 Marketing Science, Master, ASPO 01.04.2016, optional course MARPF-542 Accounting and Finance, Master, ASPO 01.04.2016, optional course MASCM-542 Supply Chain Management, Master, ASPO 01.04.2016, optional course MASCM-542 Supply Chain Management, Master, ASPO 01.04.2017, optional course
Workload: 60 class hours (= 45 clock hours) over a 15-week period. The total student study time is 180 hours (equivalent to 6 ECTS credits). There are therefore 135 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Sybille Neumann
Lecturer: Dozenten des Studiengangs [updated 19.12.2019]

Learning outcomes:

After successfully completing this module, students will:

- * be familiar with the legal basis for the areas of responsibility of a company's executive board
- * understand the function and mechanisms of the main regulations relevant to the internal organization of a company, sales, financing and obligations in the event of (imminent) insolvency.
- * be able to handle these regulations independently and link them to the hierarchy of standards in compliance with EU legal requirements.
- * be able to analyze sample contracts and master the technique of drafting contracts.
- * be able structure checklists and flow charts with responsibility for contract conclusion and contract management alone or in a team.
- * understand the special responsibility management has towards compliance in critical areas and be able to design the cornerstones for an internal compliance program.
- * review their work results with regard to conflicting interests and the general principles of legal ethics.

[updated 13.09.2018]

Module content:

- Obligations of the GmbH managing director within the framework of corporate governance
- Principles of labor law with a sample employment contract (non-tariff employer with works council)
- Decision criteria for setting up a sales organization, sample contract with an independent auxiliary person, general terms and conditions of sale
- Bank loan agreements and loan securities with a sample loan agreement
- Basic compliance issues (corruption, tax evasion, antitrust law)
- Basic issues of insolvency law

[updated 05.12.2019]

Teaching methods/Media:

Lecture with accompanying case studies, court judgments and sample contracts; short presentations; exercises in negotiating and drafting contracts.

[updated 13.09.2018]

Recommended or required reading:

[still undocumented]

Marketing Controlling

Module name (EN): Marketing Controlling
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-562
Hours per semester week / Teaching method: 4V (4 hours per week)
ECTS credits: 6
Semester: according to optional course list
Mandatory course: no
Language of instruction: German
Assessment: Written exam (can be repeated semesterly, 90 min.) and term paper with presentation (can be repeated annually) [updated 05.12.2019]
Curricular relevance: DFMM-MAMS-562 Management Sciences, Master, ASPO 01.10.2018, semester 1, mandatory course MAMS-562 Marketing Science, Master, ASPO 01.04.2016, optional course MARPF-562 Accounting and Finance, Master, ASPO 01.04.2016, optional course MASCM-562 Supply Chain Management, Master, ASPO 01.04.2016, optional course MASCM-562 Supply Chain Management, Master, ASPO 01.04.2017, optional course
Workload: 60 class hours (= 45 clock hours) over a 15-week period. The total student study time is 180 hours (equivalent to 6 ECTS credits). There are therefore 135 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Tatjana König
Lecturer: Prof. Dr. Tatjana König [updated 01.04.2017]

Learning outcomes:

After successfully completing this module, students will:

- _ understand the interface function of marketing controlling.
- _ be familiar with the relevant instruments of strategic and operative marketing controlling and be able to apply them to real cases.
-
- _ be able to calculate and evaluate the impact and profitability of marketing measures.
- _ understand and be able to apply complex performance measurement systems.
- _ be able to process analysis results for marketing controlling and present them clearly in a presentation

[updated 05.12.2019]

Module content:

- _ Classification of marketing controlling
- o Functions and tasks
- o Organizational integration and interfaces
- _ Strategic marketing controlling
- o Market and customer analysis
- o Employee analysis
- o Brand controlling
- o Marketing target systems
- _ Operative marketing controlling
- o Product and service controlling
- o Price controlling
- o Communication and sales promotion controlling
- o Sales controlling
- _ Innovative approaches in marketing controlling

[updated 13.09.2018]

Teaching methods/Media:

Lecture with exercises and case studies

[updated 13.09.2018]

Recommended or required reading:

- Reinecke, Sven/ Eberharter, Jasmin (2010): *Marketingcontrolling 2010: Einsatz von Methoden und Verfahren des Marketingcontrollings in der Praxis*, in: *Controlling – Zeitschrift für Erfolgsorientierte Unternehmenssteuerung*, 22. Jg., Nr. 8/9, pp. 438-447.
- Reinecke, Sven/ Janz, Simone (2007): *Marketingcontrolling: Sicherstellen von Marketingeffektivität und Effizienz*. Stuttgart: Kohlhammer Verlag.
- Reinecke, Sven/ Tomczak, Torsten (Hrsg.) (2006): *Handbuch Marketingcontrolling: Effektivität und Effizienz einer marktorientierten Unternehmensführung*, Wiesbaden: Gabler.
- Ziehe, Nicola (2013): *Marketing-Controlling*. Köln: Johanna-Verlag.

[updated 05.12.2019]

Practical Phase - Internship

Module name (EN): Practical Phase - Internship
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-Z1
Hours per semester week / Teaching method: -
ECTS credits: 30
Semester: according to optional course list
Mandatory course: no
Language of instruction: German/English
Assessment: Paper with presentation, certificate confirming practical experience [updated 13.09.2018]
Curricular relevance: MAMS-Z1 Marketing Science, Master, ASPO 01.04.2016, optional course MARPF-Z1 Accounting and Finance, Master, ASPO 01.04.2016, optional course MASCM-Z1 Supply Chain Management, Master, ASPO 01.04.2016, optional course MASCM-Z1 Supply Chain Management, Master, ASPO 01.04.2017, optional course
Workload: The total student study time for this course is 900 hours.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Studienleitung
Lecturer: Studienleitung [updated 01.04.2017]

Learning outcomes:

After successfully completing this module, students will have developed the following skills:

- Technical skills (know-how, linking theoretical knowledge with practical experience)
- Personal instrumental skills (using tools, techniques, methods that enable knowledge to be generated and/or planned and applied in a targeted manner)
(e.g. information management, time management, presentation techniques, computer applications)
- Systemic skills (e.g. skills such as creativity, adaptability, flexibility in implementing concepts, etc., which are necessary to understand one's own work as part of an extensive system and be able to carry it out efficiently)
(introducing innovations, initiating, planning and implementing change processes, networked thinking)
- Communication skills (teamwork, designing internal coordination processes and the presentation of results within and outside the company)
- Ability to critically reflect one's own (technical, systemic, communicative and instrumental) skills and competences and compare them in a target-performance profile

This module consists of a supervised practical phase in a company or institution with a total duration of 24 weeks. It is however, also possible to split the practical phase up into two shorter phases.

[updated 05.12.2019]

Module content:

Students will take on tasks and projects in the field of marketing (product/brand management, strategy, market research, CRM, sales, e-business, public relations, etc.). Students must sign a study contract with the company at the beginning of their practical phase. Before concluding the contract, both the office responsible for internships, as well as the admissions committee must approve the internship.

Within the framework of a paper with a presentation, students will present a suitable project or task from their internship in detail with the respective problems/challenges and approaches. In doing so, students should reflect upon the skills acquired/developed during their internship.

The paper should also contain a technical and interdisciplinary skill profile in the form of a comparison between target and actual skills and a definition of the resulting fields of action.

The paper must be submitted no later than 4 weeks after completion of the practical phase.

[updated 20.11.2019]

Teaching methods/Media:

Practical experience

[updated 13.09.2018]

Recommended or required reading:

[still undocumented]

Professional Personnel Selection and Self-Positioning for Specialists and Managers

Module name (EN): Professional Personnel Selection and Self-Positioning for Specialists and Managers
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-532
Hours per semester week / Teaching method: 4S (4 hours per week)
ECTS credits: 6
Semester: according to optional course list
Mandatory course: no
Language of instruction: German
Assessment: Term paper and/or oral examination (type of exam will be announced at the beginning of the course) / can be repeated annually [updated 13.09.2018]
Curricular relevance: MAMS-532 Marketing Science, Master, ASPO 01.04.2016, optional course MARPF-532 Accounting and Finance, Master, ASPO 01.04.2016, optional course MASCM-532 Supply Chain Management, Master, ASPO 01.04.2016, optional course MASCM-532 Supply Chain Management, Master, ASPO 01.04.2017, optional course
Workload: 60 class hours (= 45 clock hours) over a 15-week period. The total student study time is 180 hours (equivalent to 6 ECTS credits). There are therefore 135 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Markku Klingelhöfer
Lecturer: Prof. Dr. Markku Klingelhöfer [updated 01.04.2017]

Learning outcomes:

After successfully completing this module, students will:

- _ know the essential methods and techniques of professional personnel selection.
- _ know how to optimize key success factors in order to position themselves successfully in organizations.
- _ have learned to independently apply selection techniques and scenarios.
- _ be familiar with the effectiveness of various selection instruments.

[updated 13.09.2018]

Module content:

- Principles of personnel selection
- Personnel selection methods
- Critical success factors for optimized self-positioning
- Professional interview techniques
- Exercises on techniques, methods and teaching content

[updated 13.09.2018]

Teaching methods/Media:

Lecture, exercises

[updated 13.09.2018]

Recommended or required reading:

- Achouri, Cyrus: Recruiting und Placement, 2. Auflage, Wiesbaden 2010 (1st edition from 2007 also available as an e-book in OPAC)
- Kanning, Uwe Peter: Standards der Personaldiagnostik
- Gabrisch, Jochen: Die Besten entdecken
- Hesse; Schrader: Assessmentcenter für Hochschulabsolventen
- Lucas, Michael: Effiziente Personalauswahl durch professionelle Interviewführung
- Manke, Thomas: Personalauswahlverfahren unter der Lupe
- Püttjer; Schnierda: Assessment-Center-Training für Führungskräfte Stotz; Wedel: Employer Branding

[updated 20.11.2019]

Research Phase - Internship

Module name (EN): Research Phase - Internship
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-Z2
Hours per semester week / Teaching method: -
ECTS credits: 30
Semester: according to optional course list
Mandatory course: no
Language of instruction: German
Assessment: Paper with presentation, qualified certificate, if applicable, verification of research work in the form of research proposals and publications (can be repeated semesterly) [updated 13.09.2018]
Curricular relevance: MAMS-Z2 Marketing Science, Master, ASPO 01.04.2016, optional course MARPF-Z2 Accounting and Finance, Master, ASPO 01.04.2016, optional course MASCM-Z2 Supply Chain Management, Master, ASPO 01.04.2016, optional course MASCM-Z2 Supply Chain Management, Master, ASPO 01.04.2017, optional course
Workload: The total student study time for this course is 900 hours.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Studienleitung
Lecturer: Studienleitung [updated 01.04.2017]

Learning outcomes:

After successfully completing this module, students will have developed the following skills:

- Technical skills (know-how, linking theoretical knowledge with current research practice)
- Methodological skills (scientific methods, techniques and procedures, for example in the context of empirical research)
- - Personal instrumental skills (using tools, techniques, methods, databases that enable knowledge to be generated and/or planned and applied in a targeted manner)
(e.g. information management, time management, presentation techniques, computer applications, databases

for literature research)
- Scientific skills (precision in citation, formatting scientific texts, definition of research gaps or goals)
- Systemic skills (e.g. skills such as creativity, adaptability, flexibility in implementing concepts, etc. that are necessary to understand one's own work as part of an extensive system and be able to carry it out efficiently)
(introducing innovations, initiating, planning and implementing change processes, networked thinking)
- Communication skills (teamwork, designing internal coordination processes and the presentation of research findings within and outside the institute)
- Ability to critically reflect one's own
(technical, systemic, communicative and instrumental) skills

[updated 05.12.2019]

Module content:

This module consists of a supervised research phase in, for example, an institute over a total duration of 24 weeks. It is however, also possible to split the research phase up into two shorter phases. Students will take on tasks within the framework of scientific research projects or the supervision of a research project (e.g. communication within the research team or with external project partners, preparation of project plans, cooperation in scientific concept development, support in the preparation of research proposals, support in the evaluation and preparation of research documentation, outcome reports and scientific or practice-oriented articles).

Within the framework of a paper with a presentation, students will present a suitable project or task from their research project in detail with the respective problems/challenges and approaches. In doing so, students should reflect upon the skills they acquired/developed during their internship.

The paper should also contain a technical and interdisciplinary skill profile in the form of a comparison between target and actual skills and a definition of the resulting fields of action. The paper must be submitted no later than 4 weeks after completion of the research phase.

[updated 13.09.2018]

Teaching methods/Media:

Research experience

[updated 13.09.2018]

Recommended or required reading:

[still undocumented]

Self-Reflection and Storytelling

Module name (EN): Self-Reflection and Storytelling
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-533
Hours per semester week / Teaching method: 4S (4 hours per week)
ECTS credits: 6
Semester: according to optional course list
Mandatory course: no
Language of instruction: German
Assessment: Presentation [updated 23.11.2020]
Curricular relevance: MASCM-533 Supply Chain Management, Master, ASPO 01.04.2017, optional course, general subject
Workload: 60 class hours (= 45 clock hours) over a 15-week period. The total student study time is 180 hours (equivalent to 6 ECTS credits). There are therefore 135 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Markku Klingelhöfer
Lecturer: Prof. Dr. Markku Klingelhöfer [updated 28.08.2020]
Learning outcomes: After successfully completing this module, students will: ... be aware of behavior patterns and their causes. ... be able to recognize and question the motives for their own actions. ... be able to examine and express central aspects of their own personality, both positive and negative. ... be able to derive beliefs and supra-individual insights from their own experiences. [updated 23.11.2020]

Module content:

- Analysis and reflection of personality-shaping events and experiences.
- Formulation of existential goals and life-shaping visions.
- Transfer one's own experiences into super-personal contexts.
- Storytelling methods: Starting with humor, personal experiences and their relevance for others.
- Professional storytelling to convey a message: Relevance, appearing competent, activation

[updated 23.11.2020]

Teaching methods/Media:

Lecture, impulses, exercises, presentations

[updated 23.11.2020]

Recommended or required reading:

[still undocumented]

Simulation in Production and Logistics

Module name (EN): Simulation in Production and Logistics
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-550
Hours per semester week / Teaching method: 4V (4 hours per week)
ECTS credits: 6
Semester: according to optional course list
Mandatory course: no
Language of instruction: German
Assessment: Term paper with presentation [updated 13.09.2018]
Curricular relevance: MAMS-550 Marketing Science, Master, ASPO 01.04.2016, optional course MARPF-550 Accounting and Finance, Master, ASPO 01.04.2016, optional course MASCM-550 Supply Chain Management, Master, ASPO 01.04.2016, optional course MASCM-550 Supply Chain Management, Master, ASPO 01.04.2017, optional course
Workload: 60 class hours (= 45 clock hours) over a 15-week period. The total student study time is 180 hours (equivalent to 6 ECTS credits). There are therefore 135 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Thomas Bousonville
Lecturer: Prof. Dr. Thomas Bousonville [updated 01.04.2017]
Learning outcomes: After successfully completing this module, students will be able to: <ul style="list-style-type: none">- explain the possible applications of simulation for planning logistic systems,- independently map tasks from production and logistics in simulation models with the simulation software "Plant Simulation"- validate and analyze the generated models and evaluate the results with regard to their task,- transfer the acquired knowledge to a realistic case study. [updated 05.12.2019]

Module content:

1. Introduction to simulation
2. Modeling and simulating material flows with "Plant Simulation"
 - 2.1. Predefined components
 - 2.2. Using the internal programming language SimTalk
3. Principles of stochastic simulation
4. Procedure model for conducting a simulation study
5. Case study on consumption-oriented material supply

[updated 13.09.2018]

Teaching methods/Media:

Lecture, exercises on the PC, group work, presentation

[updated 13.09.2018]

Recommended or required reading:

- Bangsow, S.: Fertigungssimulationen mit Plant Simulation und SimTalk, München 2008
- Rabe, M., Spiekermann, S., Wenzel, S.: Verifikation und Validierung für die Simulation in Produktion und Logistik, Berlin-Heidelberg 2008
- Wenzel, S., Weiß, M., Collisi-Böhmer, S., Pitsch H., Rose, O.: Qualitätskriterien für die Simulation in Produktion und Logistik, Berlin Heidelberg 2008
- Kuhn, A., Rabe, M.: Simulation in Produktion und Logistik. Fallbeispielsammlung, Springer, 2002

[updated 20.11.2019]

Web-Based Knowledge Management

Module name (EN): Web-Based Knowledge Management
Degree programme: Supply Chain Management, Master, ASPO 01.04.2017
Module code: MASCM-520
Hours per semester week / Teaching method: 4V (4 hours per week)
ECTS credits: 6
Semester: according to optional course list
Mandatory course: no
Language of instruction: German
Assessment: Project (creation of a website) [updated 13.09.2018]
Curricular relevance: MAMS-520 Marketing Science, Master, ASPO 01.04.2016, optional course MARPF-520 Accounting and Finance, Master, ASPO 01.04.2016, optional course MASCM-520 Supply Chain Management, Master, ASPO 01.04.2016, optional course MASCM-520 Supply Chain Management, Master, ASPO 01.04.2017, optional course WIMAScWPF-FÜ8 Industrial Engineering, Master, ASPO 01.10.2014, semester 3, optional course, general subject
Workload: 60 class hours (= 45 clock hours) over a 15-week period. The total student study time is 180 hours (equivalent to 6 ECTS credits). There are therefore 135 hours available for class preparation and follow-up work and exam preparation.
Recommended prerequisites (modules): None.
Recommended as prerequisite for:
Module coordinator: Prof. Dr. Stefan Georg
Lecturer: Prof. Dr. Stefan Georg [updated 01.04.2017]

Learning outcomes:

After successfully completing this module, students will be able to describe the structure of a knowledge management system.

In addition, they will be able to name the design elements of knowledge management and put them into practice.

Students will be familiar with the tasks of a content management system for creating websites.

They will be able to actively use the content management system Joomla.

Students will be able to add templates, plug-ins and modules to Joomla and use the system to create a knowledge management-based website.

[updated 13.09.2018]

Module content:**1. Principles of Knowledge Management**

- 1.1 Basic understanding of knowledge management
- 1.2 Introducing knowledge management in companies
- 1.3 Terms and basic concepts

2. Content Management Systems (CMS)

- 2.1 Principles of content management systems
- 2.2 The CMS "Joomla!"
- 2.3 Joomla! extensions

3. Planning a knowledge management-based website

- 3.1 Developing a suitable website theme
- 3.2 The basic structure of a website
- 3.3 Developing knowledge-based content
- 3.4 Implementing the website

[updated 13.09.2018]

Teaching methods/Media:

Course content will be conveyed in a lecture.

Group project work: lectures will be held regularly with individual group work outside the lecture and ongoing assistance/support for the project groups.

[updated 13.09.2018]

Recommended or required reading:

- Altmeyer, D./Georg, S.: Die Bedeutung von Wissensmanagement für Unternehmen, 1. Auflage 2002
- Hanke, J.K.: Content Management mit Joomla! 2.5 für Kids, 1. Auflage 2012
- Jardin, D.: Joomla! 2.5: Professionelle Webentwicklung, 1. Auflage 2012
- North, K.: Wissensorientierte Unternehmensführung: Wertschöpfung durch Wissen, 5. Auflage 2011
- Probst, J./Raub, S./Romhardt, K.: Wissen managen. Wie Unternehmen ihre wertvollste Ressource nutzbar machen, 6. Auflage 2010
- Schüppel, J.: Wissensmanagement _ Organisatorisches Lernen im Spannungsfeld von Wissens- und Lernbarrieren, 1. Auflage 1999

[updated 13.09.2018]