

Opasraportti

TaTK - Logistics 2009-2010 (2009 - 2010)

LOGISTICS

When completing the logistics programme, the student has a sufficient knowledge base to work in managerial and expert positions in business and public sector organisations. At the level of basic studies, the student obtains an overall view of logistics activities and their role in business and public sectors. At the level of intermediate studies, the student understands the basic principles of logistics system planning and knows how to apply the models and analytical tools for solving logistics problems. At the level of advanced studies, the student understands the role of logistics as a strategic resource and has a capacity to independently form conceptual and analytical models for improving logistics systems and processes.

BASIC STUDIES

721703P Introduction to Materials Management 3 ov/5 op

721704P Business Logistics 3 ov/5 op

721752P Transport and Forwarding Operations 3 ov/5 op

In addition at least 10 op of these:

721172P Cost Accounting 3 ov/5 op

721424P Business to Business Marketing 3 ov/5 op

721007P Additional Studies in Logistics 3 ov/5 op

INTERMEDIATE STUDIES

In addition to basic studies:

721720A Seminar in Logistics 5 ov/10 op

721724A Logistics Systems Analysis 3 ov/5 op

721721A International Procurement and Logistics 3 ov/5 op

In addition at least 15 op of these:

721722A Transport Law 3 ov/5 op

723022A International Business Operations 3 ov/5 op

721422A Services and Relationship Marketing 3 ov/5 op

721428A Retail Management 3 ov/5 op

721007A Additional Studies in Logistics 3 ov/5 op

ADVANCED STUDIES

721750S Master's Thesis in Logistics 16 ov/30 op

721675S Supply Chain Management 3 ov/6 op

721753S Transport Economics and Policy 3 ov/6 op

721759S Logistics Modelling and Applications 3 ov/6 op

In addition at least 12 op of these:

721414S Purchasing and Supplier Relationships in International Context 3 ov/6 op

721464S Strategic Marketing and Management 3 ov/6 op

721754S Special Issues in Logistics 3 ov/6 op

Tutkintorakenteisiin kuulumattomat opintokokonaisuudet ja -jaksot

721007P: Additional Courses in Logistics, Basic Level, 0 op
 721007A: Additional Courses in Logistics, Intermediate Level, 0 op
 721704P: Business Logistics, 5 op
 721721A: International Procurement and Logistics, 5 op
 721703P: Introduction to Materials Management, 5 op
 721759S: Logistics Modelling and Applications, 6 op
 721724A: Logistics System Analysis, 5 op
 721750S: Master's Thesis, Logistics, 30 op
 721720A: Seminar in Logistics, 10 op
 721754S: Special Issues in Logistics, 6 op
 721675S: Supply Chain Management, 6 op
 721753S: Transport Economics and Policy, 6 op
 721722A: Transport Law, 5 op
 721752P: Transport and Forwarding Operations, 5 op

Opintojaksosten kuvaukset

Tutkintorakenteisiin kuulumattomien opintokokonaisuuksien ja -jaksojen kuvaukset

721007P: Additional Courses in Logistics, Basic Level, 0 op

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

5 ects.

Language of instruction:

Free.

Timing:

Free.

Learning outcomes:

To be agreed with the professor in Logistics.

Contents:

Free.

Learning activities and teaching methods:

To be agreed with the professor in Logistics.

Recommended or required reading:

Free.

Assessment methods and criteria:

To be agreed with the professor in Logistics.

Grading:

1-5.

Person responsible:

Professor Jari Juga.

721007A: Additional Courses in Logistics, Intermediate Level, 0 op**Opiskelumuoto:** Intermediate Studies**Laji:** Course**Vastuuyksikkö:** Faculty of Economics and Business Administration**Arvostelu:** 1 - 5, pass, fail**Opintokohteen kielet:** Finnish**Voidaan suorittaa useasti:** Kyllä**ECTS Credits:**

5 ects.

Language of instruction:

Free.

Timing:

Free.

Learning outcomes:

To be agreed with Professor in Logistics.

Contents:

Free.

Learning activities and teaching methods:

To be agreed with Professor in Logistics.

Recommended or required reading:

Free.

Assessment methods and criteria:

To be agreed with Professor in Logistics.

Grading:

1-5.

Person responsible:

Professor Jari Juga.

721704P: Business Logistics, 5 op**Voimassaolo:** 01.08.2005 -**Opiskelumuoto:** Basic Studies**Laji:** Course**Vastuuyksikkö:** Faculty of Economics and Business Administration**Arvostelu:** 1 - 5, pass, fail**Opettajat:** Jari Juga**Opintokohteen kielet:** English**Leikkaavuudet:**

ay721704P Business Logistics (OPEN UNI) 5.0 op

721704A Business Logistics 5.0 op

ECTS Credits:

5 ects.

Language of instruction:

English.

Timing:

Period B.

Learning outcomes:

The student understands how logistics contributes to business competitiveness and knows the central planning principles of logistics activities and their mutual relationships.

Contents:

Course topics include logistics service level, total cost analysis, transport and inventory decisions, logistics performance measurement, just-in-time logistics, ordering and replenishments, and green logistics. The development of the logistics discipline and current logistics issues will also be discussed.

Learning activities and teaching methods:

The course consists of lectures (24 h), a written course assignment (case study) and course literature.

Recommended or required reading:

Ballou, R.H. (2004), Business logistics/ Supply chain management: planning, organizing and controlling the supply chain, Prentice-Hall: Upper-Saddle River.

[Availability of course books.](#)**Assessment methods and criteria:**

Exam (lectures, literature) 60%, and course assignment 40%. Assignment and exam to be completed during the same academic year.

Grading:

1-5.

Person responsible:

Professor Jari Juga.

721721A: International Procurement and Logistics, 5 op

Voimassaolo: - 31.07.2010

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Ulla Lehtinen

Opintokohteen kielet: Finnish

ECTS Credits:

5 ects.

Language of instruction:

English.

Timing:

Period C.

Learning outcomes:

The student gains a comprehensive understanding of procurement and logistics management in an international business context. The course also increases awareness of challenges in international logistics and business management.

Contents:

The course presents concepts, principles, and techniques of procurement and logistics management in international business environment. Emphasis will be placed on developing a basic knowledge within relevant fields of international logistics, e.g. electronic procurement, supplier analysis, coordination and integration, strategic procurement and outsourcing etc.

Learning activities and teaching methods:

Lectures (24 h), active participation to lectures and assignments specified during the course.

Recommended or required reading:

Schary, P. & Skjøtt-Larsen, T. (2001 or 2007), Managing the Global Supply Chain, Copenhagen Business School Press. Supplementary material provided by lecturer.

[Availability of course books.](#)**Assessment methods and criteria:**

Exam (textbook, lectures, articles) 60% and assignments & class participation 40%.

Grading:

1-5.

Person responsible:

Assistant Professor.

721703P: Introduction to Materials Management, 5 op

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Jari Juga

Opintokohteen kielet: Finnish

ECTS Credits:

5 ects.

Language of instruction:

Finnish.

Timing:

Period B.

Learning outcomes:

The student understands the basic concepts of materials management and logistics and knows how to use basic material control methods in operational production and logistics management.

Contents:

The course includes basic concepts of materials management and logistics, manufacturing operations and planning, material control concepts and methods and basic concepts in quality management.

Learning activities and teaching methods:

Lectures (24 h) and literature. Lectures include basic calculations related to production and logistics operations.

Recommended or required reading:

Arnold, T.J.R. & Chapman, S.N. (2001), Introduction to materials management, Prentice Hall Inc., Upper Saddle River.

[Availability of course books.](#)

Assessment methods and criteria:

Exam.

Grading:

1-5.

Person responsible:

Professor Jari Juga.

721759S: Logistics Modelling and Applications, 6 op

Voimassaolo: - 31.07.2010

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Maqsood Sandhu

Opintokohteen kielet: Finnish

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

6 ects.

Language of instruction:

English / Finnish.

Timing:

Period A.

Learning outcomes:

Upon completion of the course, students have gained a good understanding of logistics modelling and systems analysis. The student knows how to analyse information and material flows in supply chains and is able to deploy the knowledge in computer-based simulation problems.

Contents:

The course extends the students knowledge on logistics modelling and systems analysis and offers insights into application areas such as process modelling, simulation and value stream analysis methods. Emphasis will be given to the art of model formulation, process modelling and analysis of model results. The students are expected to participate actively in classroom training to improve their skills on selected modelling and simulation tools.

Learning activities and teaching methods:

The course includes lectures, class-room exercises and an independent simulation work with computer class instruction.

Recommended or required reading:

(Selected parts): Wisner, J.D. & Stanley, L. L. (2008), Process Management: Creating Value along the Supply Chain, Thomson. Harrington, H.J. & Tumay (2000), Simulation Modeling Methods, McGraw-Hill. Supplementary material distributed in the class.

[Availability of course books.](#)

Assessment methods and criteria:

The final exam will be based on lectures, class-room exercises and study materials (50%). The simulation work is graded based on the final report (50%).

Grading:

1-5.

Person responsible:

Assistant Professor.

721724A: Logistics System Analysis, 5 op

Voimassaolo: 01.08.2002 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Jouni Juntunen

Opintokohteen kielet: English

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

5 ect.

Language of instruction:

English.

Timing:

Period D.

Learning outcomes:

The objective is to familiarize students with strategic and analytical elements of logistical systems design and management. The students will be prepared to solve and master practical problems of logistics planners and managers.

Contents:

Theoretical approach of the course is operation management. Exercise problems include resource allocation, inventory management, and transportation problems. The systems analysis tools that are practiced during the course are linear programming, simulation, and queuing models.

Learning activities and teaching methods:

Lectures and computer class instruction.

Recommended or required reading:

Nahmias, S. (2001), Production and Operations Analysis, McGraw-Hill, Irwin. Hillier, F.S. & Hillier, M.S. (2003), Introduction to Management Science - A Modeling and Case Studies Approach with Spreadsheets, 2nd ed., McGraw Hill, Irwin. Supplementary material will delivered during the contact hours.

[Availability of course books.](#)

Assessment methods and criteria:

Assignments and a class project. Exam.

Grading:

1-5.

Person responsible:

Jouni Juntunen.

721750S: Master's Thesis, Logistics, 30 op

Opiskelumuoto: Advanced Studies

Laji: Diploma thesis

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: A,B,N,C,M,EX,L

Opintokohteen kielet: English, Finnish

ECTS Credits:

30 ects.

Language of instruction:

Finnish / English.

Timing:

Period: autumn - spring.

Learning outcomes:

Master's thesis (pro gradu) is a comprehensive treatment of selected subject in logistics, showing the student's capacity for analytical and critical judgment and scientific communication.

Contents:

A master's thesis builds on a well-formulated research problem and the specification of more explicit research questions. Moreover, a thesis contains an overview of theoretical literature which forms the framework for the study. Relevant research methods and profound empirical analysis, combined with well-structured and readable text are seen as important criteria of thesis evaluation. In addition, the evaluation will be based on the theoretical and practical contribution of the study.

Learning activities and teaching methods:

Compulsory participation in pro gradu seminars, written research proposal and two interim reports, final manuscript. Also required is to act as opponent in the sessions.

Assessment methods and criteria:

After accepted thesis manuscript, the student is expected to write a maturity test in his/her own native language.

Grading:

Approbatur - Laudatur.

Person responsible:

Professor Jari Juga.

721720A: Seminar in Logistics, 10 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Pekkarinen, Saara Marketta

Opintokohteen kielet: Finnish

ECTS Credits:

10 ects.

Language of instruction:

Finnish / English.

Timing:

Period B.

Learning outcomes:

Upon completion of the course, students are able to write a research paper and give academic presentation. They know academic writing techniques and are able to search literature from their research field.

Contents:

The research seminar work has as its goal to advance the academic writing and research skills of logistics students. In tutored seminar sessions, the student is expected to write a research paper focusing on selected theoretical theme in logistics. A special emphasis will be given to the search of relevant literature and academic writing techniques. The course is also intended to serve as a basis for master's thesis work.

Learning activities and teaching methods:

The course consists of an introductory lecture, independent work of a student to write a research paper, seminar presentations, and acting as an opponent.

Recommended or required reading:

Will be announced in the sessions.

Assessment methods and criteria:

Research paper, seminar sessions (compulsory participation).

Grading:

1-5.

Person responsible:

Assistant Professor.

721754S: Special Issues in Logistics, 6 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

6 ects.

Language of instruction:

Finnish / English.

Timing:

Period: Free.

Learning outcomes:

The student learns how to address and solve practical logistics problems with academic tools and how to report the results for business management.

Contents:

The purpose of the course is to apply the student's knowledge and skills on some topic area in logistics. The course will be tailored to the student's individual goals, also including research-oriented company or industry specific development projects. More detailed information on the course contents, literature requirements and working methods will be offered each year twice, in the beginning of autumn and spring terms. The general idea is that the course would contribute to the preliminary plan for the student's thesis work.

Learning activities and teaching methods:

Mainly individual work based on supervisor's instructions.

Assessment methods and criteria:

Assessment is based on the written report.

Grading:

1-5.

Person responsible:

Jouni Juntunen.

721675S: Supply Chain Management, 6 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Jari Juga

Opintokohteen kielet: English

ECTS Credits:

6 ects.

Language of instruction:

English.

Timing:

Period C.

Learning outcomes:

The student gains a comprehensive understanding of strategic issues in logistics and supply chain management as well as their management implications with other business functions and partnering organizations.

Contents:

The definition and underlying theoretical models of supply chain management are examined, together with contemporary phenomena and supply chain improvement initiatives. Collaborative supply chain practices (ECR, CPFR, SCOR etc.) are discussed. A special emphasis will be given to the question of supply chain dynamics and integration as well as enabling supply chain technologies and standards.

Learning activities and teaching methods:

Lectures (24 h) with compulsory course assignments (class presentations) and literature.

Recommended or required reading:

Harrison, A. & v.Hoek, R. (2002), Logistics Management and Strategy, Prentice-Hall, Upper Saddle River. Simchi-Levi, D., Kaminsky, P. & Simchi-Levi, E. (2007), Designing and Managing the Supply Chain. McGraw-Hill/Irwin.

[Availability of course books.](#)

Assessment methods and criteria:

Exam.

Grading:

1-5.

Person responsible:

Professor Jari Juga.

721753S: Transport Economics and Policy, 6 op

Voimassaolo: 01.08.2001 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Pekkarinen, Saara Marketta

Opintokohteen kielet: English

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

6 ect.

Language of instruction:

English.

Timing:

Period D.

Learning outcomes:

The student develops an understanding of the transport sector from the economic point of view, including knowledge of transport policy and EC transport law as well the capabilities of understanding and analyzing transport markets.

Contents:

The role of transport in the economy, the demand for and the costs of transport as well as on the organisation of transport supply are examined. The students will get familiar with transportation economics with location issues, network economics and economics of industrial organizations. Additionally, basic facts of EC Transport Law will be learned through independent reading.

Learning activities and teaching methods:

Lectures 12 h and assignments/individual reading.

Recommended or required reading:

Quinet, E. and Vickerman, R. (2004), Principles of Transport Economics, Cheltenham, UK: Edward Elgar. Supplementary readings according to separate instruction during lectures.

[Availability of course books.](#)

Assessment methods and criteria:

Exam.

Grading:

1-5.

Person responsible:

D.Sc. Saara Pekkarinen.

721722A: Transport Law, 5 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Pulkkinen Markku

Opintokohteen kielet: Finnish

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

5 ects.

Language of instruction:

Finnish.

Timing:

Period B.

Learning outcomes:

The student knows how to make contracts related to procurement and transport, combined with a general understanding of transport contracts in contract law and transport legislation. The student is familiar with the normative basis of transport law and knows where to find the related norms and legislation.

Contents:

Transport transactions, payment and financing, international transport legislation, handling of disputes, and international commercial cooperation.

Learning activities and teaching methods:

Introductory lecture 3 h and independent study of literature. The course is intended only for students of logistics.

Recommended or required reading:

Sisula-Tulokas, Leena: Kuljetusoikeuden perusteet, 2. uudistettu painos, 2003; Sisula-Tulokas, L: Ulkomaankauppaoikeus.1998; Supplementary readings to be announced at the introductory lecture.

[Availability of course books.](#)

Assessment methods and criteria:

Exam.

Grading:

1-5.

Person responsible:

Markku Pulkkinen, LL.M.

721752P: Transport and Forwarding Operations, 5 op

Voimassaolo: 01.08.2005 - 31.07.2010

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Faculty of Economics and Business Administration

Arvostelu: 1 - 5, pass, fail

Opettajat: Jouni Juntunen

Opintokohteen kielet: Finnish

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

5 ects.

Language of instruction:

English.

Timing:

Period C.

Learning outcomes:

The main target is to give the students basic knowledge on freight transport and forwarding operations from the managerial point of view. The focus is in road freight. After the course the students know the principles and methods of operational management and understand logistics service industry's business models, strategies and performance issues.

Contents:

The course includes a description of the business environment and freight operations by transport mode, forwarding business, documentation in international trade, the role of IT, etc. Performance of logistics service providers and the supply chain management implications will also be examined.

Learning activities and teaching methods:

Lectures, assignments.

Recommended or required reading:

Course book: Bardi, E.J., Coyle, C.J. & Novack, R.A. (2006), Management of transportation. Mason, Ohio: Thomson/South-Western, Mason, Ohio. Additional material: Coyle, C.J., Bardi, E.J., & Novack, R.A. (2006), Transportation, 6th. ed. Thomson/South-Western, Mason, Ohio. Other material delivered during the contact hours.

[Availability of course books.](#)

Assessment methods and criteria:

Exam and assignments.

Grading:

1-5.

Person responsible:

Jouni Juntunen.