Case Studies in Air Traffic Management and Logistics

Programme course

6 credits

Fallstudier inom flygtrafik och logistik

TNFL03

Valid from: 2017 Spring semester

Determined by
Board of Studies for Industrial Engineering and Logistics

Date determined
2017-01-25

Offered for the last time
Spring semester 2018

Replaced by
TNSL22

Main field of study
Logistics

Course level
First cycle

Advancement level
G1X

Course offered for
- Air Transportation and Logistics, Bachelor's Programme

Specific information
The course is not available for exchange students

Entry requirements
Note: Admission requirements for non-programme students usually also include admission requirements for the programme and threshold requirements for progression within the programme, or corresponding.

Prerequisites
Basics in Air traffic and Air Transportation

Intended learning outcomes

The aim of the course is to combine in-depth studies of air traffic management and logistics with training in scientific writing. This includes correct use of technical language and style, application of logical reasoning and ability to provide concise summaries of longer text. The course will also give students the opportunity to develop and expand their vocabulary, in particular in areas which they can be expected to encounter in their professional lives.
After completing the course, the student is expected be able to:

- Explain what is important to consider and take into account in infrastructural development at airports.
- Deal with problems that arise in abnormal situations within air traffic, such as weather related crises. This includes being able to suggest solutions for dealing with both resources and the infrastructure, with aircraft and crew as well as for dealing with passengers and goods.
- Describe international regulations governing the area of air traffic security and their implementations.
- Describe the environmental impact of flying and propose different solutions for decreasing this impact.

After completing the course, the student is also expected to be able to:

- Read, understand and discuss English texts of different kinds, in particular texts connected to air traffic and logistics
- Extract technical content from popular articles written by non-specialists (journalists, reporters, etc.); expand the content and comment on it
- Show command of a more specialist vocabulary and terminology of the kind used in the field of air transport.
- Present information in a way that is easy to follow by the others
- Intelligently and objectively critique the work of others
- Formulate and argue for personal ideas and viewpoints
- Summarize a longer text

Course content

Texts connected to air traffic and logistics are read and discussed. Training is given in meeting and presentation techniques, based on case studies. Writing skills will be practised through reports and summaries of different kinds.
The subject content will focus specifically upon the building of airport infrastructure, dealing with crises and disturbances in air traffic, technology and methods for working with air safety and the environmental effects of flying. Revision and work with style and text coherence as the need arises.

Teaching and working methods

The course is built up around lessons and seminars where active participation is expected. The 1st part is devoted to scientific writing (using aviation-related texts as examples); the 2nd part is case studies.

Examination

UPG2	Hand-in assignments	6 credits	U, 3, 4, 5

Compulsory attendance and active participation are required and form the basis of UPG2.

Grades

Four-grade scale, LiU, U, 3, 4, 5

Department

Institutionen för teknik och naturvetenskap

Director of Studies or equivalent

Erik Bergfeldt

Examiner

Valentin Polishchuk

Course website and other links

http://http://www.itn.liu.se/~toban17/courses.html

Education components

Preliminary scheduled hours: 57 h
Recommended self-study hours: 103 h

Course literature

Fastställs senare.

Common rules

Regulations (apply to LiU in its entirety)

The university is a government agency whose operations are regulated by legislation and ordinances, which include the Higher Education Act and the Higher Education Ordinance. In addition to legislation and ordinances, operations are subject to several policy documents. The Linköping University rule book collects currently valid decisions of a regulatory nature taken by the university board, the vice-chancellor and faculty/department boards.

LiU's rule book for education at first-cycle and second-cycle levels is available at http://styrdokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva.