Linnæus University

Jnr: 2015/1646-3.1.2

Course syllabus

Faculty of Technology
Department of Physics and Electrical Engineering

4ED314 Antennteori, 7,5 högskolepoäng
Antenna Theory, 7.5 credits

Main field of study
Electrical Engineering

Subject Group
Electrical Engineering

Level of classification
Second Level

Progression
A1N

Date of Ratification
Approved by Faculty of Technology 2015-05-22
The course syllabus is valid from spring semester 2016

Prerequisites
Bachelors degree 180 credits in electrical engineering, or the equivalent, and Antenna technology, 7.5 credits or the equivalent.

Objectives
The course gives a specialization in antenna technology. The student is expected to combine knowledge of mathematics and antenna technology to obtain an overview of the design and computation problems of the field.

Content
The course comprises the following topics:

- antenna synthesis, Schelkunoff's polynomial
- integral equations for the computation of current distributions
- an orientation on antenna types
- aperture antennas, spectral analysis
- Microstrip antennas.

Type of Instruction
Teaching consists of lectures and laboratory sessions.

Examination
The course is assessed with the grades A, B, C, D, E, Fx or F.
The grade A constitutes the highest grade on the scale and the remaining grades follow in descending order where the grade E is the lowest grade on the scale that will result in a pass. The grade F means that the student's performance is assessed as fail (i.e. received the grade F).

Assignments and exam.

Course Evaluation

During the course or in close connection to the course, a course evaluation is to be carried out. The result and analysis of the course evaluation are to be communicated to the students who have taken the course and to the students who are to participate in the course the next time it is offered. The course evaluation is carried out anonymously. The compiled report will be filed at the Faculty.

Credit Overlap

This course cannot be part of a degree in combination with another course in which the content fully or partly correspond to the content of this course: 4ED014 Antenna Theory, 7.5 credits

Other

Grade criteria for the A–F scale are communicated to the student through a special document. The student is to be informed about the grade criteria for the course by the start of the course at the latest.

Required Reading and Additional Study Material

Required reading

Balanis C. A., *Antenna theory*, 3rd ed., Wiley, 2005. Pages 300 (1100).