

Syllabus

for course at advanced level

Meteorology II
Meteorologi II

**7.5 Higher Education
Credits**
7.5 ECTS credits

Course code:	MO8002
Valid from:	Spring 2008
Date of approval:	2007-11-19
Department	Department of Meteorology
Subject	Earth Science and Physical Geography
Specialisation:	A1F - Second cycle, has second-cycle course/s as entry requirements

Decision

This syllabus has been approved by the Board of the Faculty of Science at Stockholm University 2007-11-19.

Prerequisites and special admittance requirements

Knowledge corresponding to Meteorology I, 15 HECs (MO8001). Also required is knowledge equivalent to English B.

Course structure

Examination code	Name	Higher Education Credits
8002	Meteorology II	7.5

Course content

This course deals with basic fluid dynamics applied to atmospheric and oceanographic flow phenomena. The course comprises:

- conservation laws for mass, momentum, and energy
- synoptic-scale motions in the atmosphere
- balanced flows: geostrophy, gradient wind, and thermal wind
- conservation laws for vorticity and circulation

Learning outcomes

After taking this course the student should be able to apply fluid dynamics theory to analyse flow phenomena in the atmosphere and ocean.

Education

The teaching consists of lectures and exercises.

Forms of examination

- Examination is done by a written and/or oral test as well as home projects.
- Grading is done on a seven-step scale: A=excellent B=Very good C=Good D=Satisfactory E=Sufficient F=Unsatisfactory Fx=Entirely unsatisfactory.
- The grading criteria are handed out at the beginning of the course.
- For passing the course, at least grade E is required, as well as passed oral and/or written presentations of

laborations and participation in compulsory teaching.

e) Students that do not pass the regular test have a right to attempt at least four further tests as long as the course is given. As "tests" are understood also other compulsory parts of the course. Students that have passed a test are not allowed to attempt another test in order to receive a higher grade. Students that have failed an examination twice have a right to demand that another teacher is appointed to determine the grade. The request for this should be directed to the Board of the department.

Interim

Students may demand that the examination is performed according to this syllabys even after it has ceased to be valid. However, this may be done at most three times during the two years after the course was last given. The request for this should be directed to the Board of the department.

Limitations

This course may not be included in a degree together with Meteorology, Basic course, 20p (ME1170), or Dynamic Meteorology I, 12hp (MO3006).

Misc

The course is a part of the Master's programme in Meteorology, Oceanography and Climate, but may also be taken as an individual course.

Required reading

The requires reading is decided by the Board of the department, and is then presented in an attachment to the course syllabus.