

# Syllabus

for course at advanced level

**Practical Meteorology**  
**Praktisk meteorologi**

**15.0 Higher Education  
Credits**  
**15.0 ECTS credits**

<b>Course code:</b>	MO8003
<b>Valid from:</b>	Autumn 2016
<b>Date of approval:</b>	2016-10-03
<b>Department</b>	Department of Meteorology
<b>Main field:</b>	Meteorology
<b>Specialisation:</b>	A1F - Second cycle, has second-cycle course/s as entry requirements

## Decision

This syllabus has been approved by the Board of Science at the Faculty of Science, Stockholm University, 2016-10-03.

## Prerequisites and special admittance requirements

Knowledge corresponding to 90 HECs in Meteorology, whereof at least 30 HECs on advanced level. Also required is knowledge equivalent to English B.

## Course structure

Examination code	Name	Higher Education Credits
8003	Practical Meteorology	15

## Course content

The course gives an overview of and insight into the work material that a forecast meteorologist applies in practice and includes:

- meteorological observation systems and remote sensing
- analysis and nowcasting
- numerical weather forecasts
- forecast methods on the meso scale
- conceptual models
- customisation

## Learning outcomes

After taking this course the student is expected to be able to:

- carry out manual analysis of weather situations as well as produce a manual short-term weather forecast
- use meteorological observation systems and remote sensing to produce forecasts
- analyse numerical weather forecasts as well as interpret results and judge their reliability, including the impact of meso scale phenomena on forecasts
- formulate and customise forecasts

## Education

The teaching consists of lectures, group tutorials, exercises. Participation in exercises and the associated group tutorials is compulsory. If there are special reasons, the Examiner may, after consulting the course teacher, allow the student to omit certain parts of the compulsory teaching.

### **Forms of examination**

a) Examination is done by written and oral tests. b) Grading is done on a seven-step scale: A = Excellent B = Very good C = Good D = Satisfactory E = Sufficient Fx = Failed, some more work is required F = Failed, a lot more work is required. c) The grading criteria are handed out at the beginning of the course. d) For passing the course, at least grade E is required as well as participation in all compulsory teaching. e) Students that do not pass the regular test have the right to take further tests as long as the course is given. The number of tests is not limited. 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, for a course or part of a course, have the right to request that another Examiner is appointed, unless special reasons speak against this. The request for this should be directed to the Board of the department. The course has at least two examination occasions per academic year the years teaching is given. Intermediate years at least one examination occasion is given. f) A student who receives grade Fx has the opportunity to do additional work in order to reach grade E. The Examiner decides what additional work is required and the criteria to pass. The additional work should be performed prior to the next examination occasion.

### **Interim**

Students may request that the examination is performed according to this syllabus even after it has ceased to be valid. However, this may be done no more than three times during a two-year period after the course was last given. The request for this should be directed to the Board of the department.

### **Limitations**

The course may not be included in a degree together with Practical Meteorology, 15p (MO7001), or equivalent.

### **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. The course is given in cooperation with the Department of Earth Sciences, Uppsala Universitet, and SMHI. Normally half of the teaching is held in Uppsala and half in Stockholm which involves travel costs. The course has teachers from SMHI and the Swedish Armed Forces.

### **Required reading**

The course literature is decided by the Board of the department and is published on the Department of Meteorology's website ([www.misu.su.se](http://www.misu.su.se)) at least two months prior to course start.