

COURSE DETAIL

THERMODYNAMICS AND DYNAMICS OF THE ATMOSPHERE

Country

Germany

Host Institution

Free University of Berlin

Program(s)

Free University Berlin

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Earth & Space Sciences

UCEAP Course Number

101

UCEAP Course Suffix**UCEAP Official Title**

THERMODYNAMICS AND DYNAMICS OF THE ATMOSPHERE

UCEAP Transcript Title

THERMODNYMC ATMOSPH

UCEAP Quarter Units

8.50

UCEAP Semester Units

5.70

Course Description

This course introduces students to the general thermodynamics and dynamics of the atmosphere. It covers the following topics: thermodynamics of the atmosphere; static alterations of the atmospheric air; statics of the atmosphere; condensation and latent heat; basics of kinematics; derivation of prognostic fundamental equations of meteorology from classical thermodynamics and hydrodynamics; scales in meteorology; Lagrange and Eulers representation; natural coordinates; fundamental equilibriums (geostrophic wind, cyclostrophic wind, gradient wind); thermal wind.

Language(s) of Instruction

German

Host Institution Course Number

24805

Host Institution Course Title

THERMODYNAMICS AND DYNAMICS OF THE ATMOSPHERE

Host Institution Campus

GEOWISSENSCHAFTEN

Host Institution Faculty**Host Institution Degree****Host Institution Department**

Meteorologie

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