



HÖGSKOLAN I GÄVLE

Indoor Environment 7.5cr

Inomhusmiljö 7,5hp

Set by Board of Technology and Built Environment

Version

Set at

Valid from

10/9/08

HT2010

Level	A1N
Education level	Second cycle
Course identifier	ME555C
Credits	7.5cr
Main field of study	Energy Systems
Subject group	Energy Technology
Disciplinary domain	Technology 100.0%

Learning outcomes After completed course the students are expected to have good knowledge about the fundamental concepts and characterization means for important physical factors in the indoor environment, and, in particular, how these factors affect the health, comfort and working performance of people. The students are also expected to be able to explain how the outdoor climate interacts with the indoor climate and, further, to have developed their skill in presenting and evaluating results of laboratory experiments in oral and written reports.

Course content The course focuses on physical and chemical factors in the indoor environment that affect the health, comfort and cognition of people, including work performance. Also some outdoor climate factors are dealt with since they have significant impact on the indoor environment.

The main environment factors addressed are:

- Thermal comfort
- Ventilation & air quality
- Noise
- Lighting
- Outdoor climate (wind, temperature, solar radiation)

Teaching The introductory part of the course consists of ordinary lectures. Later on, two laboratory

works are performed. Results of the laboratory works are then evaluated in groups and discussed at a concluding seminar.

Prerequisites	Bachelor of Science or Bachelor of Engineering in relevant subject.
Examination	Examination includes fulfilled assignments and active participation on the following items: Written examination and Laboratory works (written reports and seminar evaluations).
Grade	A, B, C, D, E, Fx, F
Other regulations	The course certificate is provided after all stages of the course have been passed, and only at the request of the student.
Sustainable environment	The majority of the course content deals with sustainable development..

Module

0010	Written examination	4.5cr	Grade: AF
0020	Laboratory work 1 (written report and seminar evaluation)	1.5cr	Grade: UG
0030	Laboratory work 2 (written report and seminar evaluation)	1.5cr	Grade: UG