COURSE DETAIL

GLACIOLOGY
Country Iceland
Host Institution University of Iceland
Program(s) University of Iceland
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Earth & Space Sciences
UCEAP Course Number 123
UCEAP Course Suffix
UCEAP Official Title GLACIOLOGY
UCEAP Transcript Title GLACIOLOGY
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description

Glaciers in the world are responding fast to climate change, they are therefore important indicators for assessing changes, but have also impact on the climate system through for example albedo feedback and sea level rise. In this course glaciers are studied, their distribution in the world, how glacier ice is formed from snow, how they move and respond to climate change. Focus is on Icelandic glaciers, their energy and mass balance, interaction of geothermal activity and glaciers in Iceland and reoccurring floods, jökulhlaups, from the main ice cap. During the course students learn terminology and concepts that equip them to understand and contribute to discussions of climate change and the role of glaciers in the climate system. Background in high school physics and math is useful, as numerical problems concerning temperature, energy budget, mass balance and flow of glaciers are solved in groups. Glacier measurement techniques are introduced, and at the end of the course ablation stakes are installed in Sólheimajökull on the south coast of Iceland in a two-day field excursion. Participation in the field trip is mandatory.

Language(s) of Instruction
English

Host Institution Course Number
JAR622M

Host Institution Course Title
GLACIOLOGY

Host Institution Campus

Host Institution Faculty
Engineering and Natural Sciences

Host Institution Degree

Host Institution Department

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