COURSE DETAIL

INTRODUCTION TO GEOGRAPHICAL INFORMATION SYSTEMS (GIS)
Country Norway
Host Institution University of Oslo
Program(s) University of Oslo
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Geography
UCEAP Course Number 105
UCEAP Course Suffix
UCEAP Official Title INTRODUCTION TO GEOGRAPHICAL INFORMATION SYSTEMS (GIS)
UCEAP Transcript Title GEOG INFO SYSTEMS
UCEAP Quarter Units 8.00
UCEAP Semester Units 5.30

Course Description

Geographical Information Systems (GIS) is a computer system designed to collect, manage, edit, analyze and present spatial information. This course introduces the basic concepts and methods in mapping, spatial analysis, and GIS that enable students to make use of GIS software to study social phenomena. The following concepts are covered: an introduction to cartography and GIS; map design and visualization; map projections and spatial representations; GIS project design and implementation; collection and management of spatial data; spatial analysis and statistics; network analysis; qualitative GIS; uncertainty and how to deal with it; and open source data and software. A series of seminar exercises enables students to make practical use of GIS with hands-on experience. Throughout the course, students learn how to develop spatial research questions and how to conduct spatial analysis using ESRI ArcGIS Pro software and different open-source alternatives. A group project integrates the concepts covered in the lectures with experience from the seminars to explore a current research question.

Language(s) of Instruction
English

Host Institution Course Number
SGO1910

Host Institution Course Title
INTRODUCTION TO GEOGRAPHICAL INFORMATION SYSTEMS (GIS)

Host Institution Course Details
http://www.uio.no/studier/emner/sv/iss/SGO1910/index.html

Host Institution Campus

Host Institution Faculty
Social Sciences

Host Institution Degree

Host Institution Department
Sociology and Human Geography

Course Last Reviewed
2022-2023

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