# COURSE DETAIL

| INTRODUCTION TO ENVIRONMENTAL SYSTEMS ANALYSIS |
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| **Country**<br>Netherlands |
| **Host Institution**<br>Wageningen University and Research Center |
| **Program(s)**<br>Wageningen University |
| **UCEAP Course Level**<br>Upper Division |
| **UCEAP Subject Area(s)**<br>Environmental Studies |
| **UCEAP Course Number**<br>124 |
| **UCEAP Course Suffix** |
| **UCEAP Official Title**<br>INTRODUCTION TO ENVIRONMENTAL SYSTEMS ANALYSIS |
| **UCEAP Transcript Title**<br>ENVIR SYSTEM ANALYS |
| **UCEAP Quarter Units**<br>5.00 |
| **UCEAP Semester Units**<br>3.30 |

**Course Description**

This course is an introduction to environmental systems analysis. The course focuses on its analytical tools to assess climate change impacts and adaptation and apply these tools to a climate change impact problem. This course teaches through an environmental systems approach for analyzing complex environmental problems such as climate change. This approach provides a general framework to consider multiple aspects in exploring alternative solutions for complex environmental problems. Different analytical tools exist that can be used in environmental systems analysis, but the focus is on the tool conceptual model, regression model, and scenario analysis that together can be used to assess climate change impacts and adaptation. The systems approach, climate change impact, and adaptation assessment are taught in lectures, practiced in a practical, and applied in an assignment. In the assignment, students study a selected climate change impact problem linked to the study fields of the environmental systems analysis groups, for example, health, tourism, ecosystem services, biofuels, and nutrients. Datasets are provided and students set up a conceptual model, develop a statistical regression model, apply a scenario analysis, study adaptation options, and communicate results.

**Language(s) of Instruction**
English

**Host Institution Course Number**
ESA20506

**Host Institution Course Title**
INTRODUCTION TO ENVIRONMENTAL SYSTEMS ANALYSIS

**Host Institution Course Details**
https://wur.osiris-student.nl/#/onderwijscatalogus/extern/cursus

**Host Institution Campus**
Wageningen University

**Host Institution Faculty**

**Host Institution Degree**

**Host Institution Department**
Environmental Studies

**Course Last Reviewed**
2022-2023

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