



UNIVERSITY OF ICELAND

Environment and Natural Resources

umhverfi.hi.is

Brynhildur Davidsdottir bdavids@hi.is

Háskóli Íslands

Welcome



Field Course in Höfn 2009

Our philosophy

- The earth is witnessing environmental change that is historically unique.
- Explaining the causes and consequences, reporting on the relevant issues or designing the appropriate management methods is well beyond the theory of a single discipline.
- Thus we foster **interdisciplinary thinking** and analysis in our search for solutions.
- Critical yet creative thinking!

Environment and Natural Resources

Graduate programme

International - 22 nationalities participated

Currently 80+ students enrolled

Three focal areas (study lines):

- Sustainable industrial & energy systems

- Environmental management, science and policy

- Resource management

Administration - Organization

Placement in UI

- Interdisciplinary organization
 - Able to take courses throughout the University
- All five school of the University joined together
 - Social sciences
 - Humanities
 - Engineering and natural sciences
 - Health sciences
 - Education
- Programme Board with representatives from all five schools.
 - Reviews applications, approves research proposals
 - Responsible for overall quality of the program

Members of the board:

Guðrún Gísladóttir professor Geography (Foreperson)

Brynhildur Davidsdottir, Environment and Natural Resources

- Engineering and Natural Sciences
 - Trausti Valsson and Jon Olafsson
- Social Sciences
 - Aðalheiður Jóhannsdóttir and Gisli Palsson
- Humanities
 - Guðni Elísson and Sigríður Þorgeirsdóttir
- Education
 - Allyson Macdonald and Ólafur Páll Jónsson
- Health sciences
 - Guðjón Þorkelsson and Kristberg Kristbergsson

Supervision and support

- The Program's supervisor is Brynhildur Davíðsdóttir, bdavids@hi.is.
- Two permanent faculty members:
 - Brynhildur Davidsdottir and Þróstur Þorsteinsson
- The Program's coordinator is Bjargey Gudbrandsdottir which also is a contact person for new students, can be reached via email: umhverfi@hi.is.
- Administrative support is provided by the office of the Faculty of Engineering and Natural Sciences in Askja (Hafdís Eyjólfsdóttir)

Supervision and support

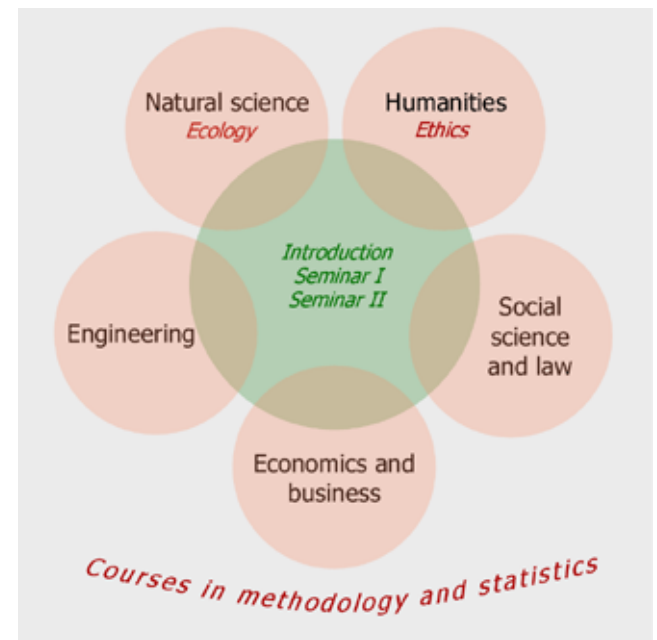
Whom to ask.....

- For any academic matters contact Brynhildur or Þröstur
- Any practical matters or questions or administrative questions contact Bjargey Guðbrandsdóttir.
- Any administrative questions contact Hafdís Eyjólfsdóttir, but always ask Bjargey first.

Program structure

Programme structure

- The Program consists of 120 ECTS credits
 - core classes
 - electives
 - research thesis (30 – 60 ECTS)
- Most courses are 6 ECTS
 - = full time student takes approximately 5 courses each semester
- A list of possible electives can be found in the course catalogue, www.umhverfi.hi.is



Required Courses

- All students are required to complete three courses regardless of background:
 - Introduction to Environment and Natural Resources (UAU102F)
 - Seminar 1: Topics in Environment and Resources (UAU101F; Sustainable development natural resource and the environment; ideology, analysis tools and policy)
 - Seminar 2: Topics in Environment and Resources (UAU201F; Environmental Governance)
- Those who have not already studied ecology or environmental ethics at a university level also need to complete:
 - Ecology B (LÍF505M)
 - Ethics of Nature (SIÐ702M)

Electives

- Provide individual specialization
- Requirement to broaden knowledge by taking courses in **additional fields**
- Programme board approval needed for courses not found in the course catalogue
- Course prerequisites
- Exchange studies encouraged

Electives (umhverfi.hi.is)

- Electives available from all participating schools. Provide individualized specialization
- Chosen in collaboration w/faculty advisor
- Sample courses
 - Climate change: past present and future, Competitive environmental strategy
 - Strategic environmental assessment, Environmental impact assessment
 - Environmental geochemistry, Environmental engineering, Ecotoxicology
 - Environmental economics, Ecological economics, Resource economics, CBA
 - EU environmental law, International environmental law, Natural resources law
 - Life cycle assessment, Eco-innovation: food products,
 - Environmental planning, Environment and Planning, GIS, Remote Sensing
 - Environmental anthropology, Environment and society in Africa
 - Education for sustainable development
 - Geothermal resources, Minerals and Energy Resources....

Informal study lines

- Sustainable energy and industrial systems, policy and management.
- Environmental science, policy and management.
- Natural resources management (focus on fisheries and wilderness management, management of protected areas, soils).
- Others: e.g. Health and the environment and Education for sustainable development

Informal study lines

1. Sustainable energy and industrial systems

Project examples:

- Sustainable energy development – indicators
- Energy policy
- LCA, WTW
- Biofuels, hydrogen, electric vehicles
- Eco-industrial parks, Green development
- Cost benefit analysis of various energy futures
- LCA analysis of various energy futures

Informal study lines

2. Environmental science, policy and management

Project examples:

- Ecological footprint
- Environmental management of business
- Environmental impact assessment
- Environmental labeling
- Climate change – mitigation and adaptation
- Air pollution, water pollution, soil pollution
- Ecosystem services
- Classification of landscape

Informal study lines

3. Natural Resources management

Project examples

- Soil restoration
- Indicators for sustainable soils
- Management of carbon sequestration
- Marine resources, management
- Aquaculture
- Management of wilderness areas
- Management of national parks

Informal study lines

Others

4. Environment and health

5. Education for sustainable development

Research project

- A 30 or 60 ECTS credits master's thesis
- The Program's permanent faculty members, Brynhildur and Þröstur assist students in assessing possible projects and selecting supervisors.
- Thesis proposal should be submitted the latest May 2012 to the program administrator for approval by the board (for those completing the programme in 2 years)
- Rules and format of thesis follow the department where thesis advisor resides
- Must register for thesis credits (see umhverfi.hi.is)

Research project

- Where you truly create your specialization
- Cooperation with Reykjavikurborg, Environmental agency, The Planning Agency, Energy Authority, Icelandic Soil Services, Environice, Alta, Efla and others
- See list on umhverfi.hi.is
- Students encouraged to apply for funding when possible.

Selecting a thesis topic

- Research topics could include e.g.:
 - Sustainable energy systems, LCA, WtW, CBA
 - Biofuels, electrification, hydrogen
 - Air pollution and health
 - Climate change policies, mitigation, adaptation
 - Environmental management systems, Environmental management, Environmental policy
 - Water pollution, soil pollution, air pollution
 - Environment impact assessment
 - Waste management
 - Ecolabels, environmental psychology, consumerism
 - Sustainable communities
 - Ecotourism and protected areas
 - Coevolution of man and nature....

Selecting a thesis advisor

- First year supervised by Þröstur or Brynhildur
- Then, based on selected specialization and thesis topic a thesis supervisor is selected. ÞÞ and BD assist.
- The main supervisor and the student prepare a thesis proposal, to be approved by the board.
- Supervisor responsible for guiding student throughout thesis writing and analysis.

Graduation

- Students will graduate from the department where their thesis Supervisor resides with a MA or a MS in Environment and Natural Resources.
- E.g. if your supervisor is in economics, you will graduate with a MS in Environment and Natural Resources from the Economics department.

Practical issues

Terms and course credits

- There are two semester (terms), autumn or fall semester (haustmisseri) and spring semester (vormisseri), each about 15 weeks
- 2 ECTS are considered equivalent to 1 weeks work
 - 6 ECTS course is therefore equivalent to 3 weeks of work
- A full semester consists of 30 ECTS
- The 2011 fall semester time table is available on: umhverfi.hi.is
 - timetable only shows a limited number of courses
- Lectures and practicals organized in blocks (stokkar).
 - 40 minutes each, with a 10 minutes break in the middle

E-services and study resources

- Ugla
- Library and study resources
 - www.rhi.hi.is
 - <http://landsbokasafn.is/>
 - www.gegnir.is
 - www.skemman.is
 - <http://www.hvar.is/>
- The brochure “Hvar eru rit í umhverfis- og auðlindafræðum” can be found on the programme’s webpage, www.umhverfi.hi.is
- Please consult our website for basic info.

Study facilities

- Wireless internet
- Photocopying
- Public computers
- Printing
- The University Bookshop – Bóksala stúdenta
 - stocks required and recommended texts
- Háskólafjölritun
 - at the corner of Suðurgata and Fálkagata
- Reading rooms / group work room
 - Reading tables in Gimli, 3rd and 1st floor

Enjoy!!

