

ESS 402 / ARCTIC 387
Exploration Seminar to Greenland and Denmark:
Ice and climate-change science and societal response

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Overview

The academic motivation is for students to understand how the Greenland Ice Sheet is changing due to climate change, how this affects people in Greenland and around the world, and how Denmark is leading scientific efforts to understand these changes and political efforts to mitigate these changes. Destinations and experiences in Greenland and Copenhagen, Denmark will be accompanied by lectures in glaciology, climate change, energy, and culture.

Travel schedule between 15 August – 10 September 2018 includes:

- 15-16 August: Copenhagen, Denmark
- 17-24 August: Ilulissat, Greenland
- 24-26 August: Aasiaat, Greenland
- 26-31 August: Nuuk, Greenland
- 1-4 September: Kangerlussuaq, Greenland
- 5-10 September: Copenhagen, Denmark

Learning goals

Destinations and experiences will be accompanied by lectures in glaciology, climate change, energy, and culture. Learning goals include:

- Obtaining real-world knowledge about climate change, and how changes in the Arctic will impact Greenland and extend globally.
- Gaining a more sophisticated understanding of how to tackle scientific problems and ask scientific questions.
- Appreciating spatial scales and time scales of changes in the Greenland Ice Sheet, and of scientists' job deciphering the past, monitoring the present, and predicting the future.
- Encouraging critical thinking, discourse, and action regarding global issues.
- Fostering connections with scientists, students, and citizens of Denmark and Greenland, and gaining respect for these two distinct, yet coupled, cultures.
- Understanding energy-saving mechanisms and philosophies in place for the city of Copenhagen and across Denmark.
- Considering shifts in Arctic governance as sea-ice loss and ice-sheet ice melt bring new access to natural resources and shipping routes.

Students will read one assigned book relating to scientific or societal aspects of Greenland, Denmark, and/or climate change. Digital or scanned material from multiple sources will be provided.

Evaluation and Grading

1. Participation and activity statements: 25%

Students are expected to participate in all group activities, and engage with the group during all activity. Instructors will ask for submitted statements in response to selected travel, exploration, and discussion activity, and each student must submit a maximum one-page response every time it is requested. Participation in the group activities will be used to evaluate 10% of the grade, and submitted statements will be used for 15% of the grade.

2. Assignments: 25%

Students are expected to complete any problem sets and reading assignments given during our time abroad by the specified due date that will be determined once the assignment is distributed, and this will be used to evaluate 15% of the grade. Late work is accepted up to two days late with one-fourth credit deducted off the grade, or by a new date I determine on a person-to-person basis with valid notice. Students are encouraged to discuss questions with other students and the instructors, but every student must turn in their own completed assignments. In addition, there will be a media piece to turn in that will be described at the start of the class, which will be worth 10% of the grade.

3. Reading book: 25%

Each student will read one approved book from the book list and instructor must approve this choice. We will have informal discussions throughout the class about the reading books used to evaluate 5% of the grade, and everyone is expected to contribute based on their own learning. At the end of the class, each student will turn in a book review that will be used for evaluating 20% of this portion of the grade. The paper should be concise and follow the guide and book-review style provided.

4. Final paper: 25%

The final paper must be submitted by November 30, 2018. The paper should be 15 pages (excluding references), double spacing, and 12-point Times New Roman font. Instructor must approve the paper topic, and you must submit an outline of the paper by the end of the course abroad. You will be provided with more details about the style and evaluation criteria for the final paper.

Plagiarism and academic misconduct

At the University level, passing anyone else's scholarly work (which can include written material, exam answers, graphics or other images, and even ideas) as your own, without proper attribution, is considered academic misconduct. Plagiarism, cheating, and other misconduct are serious violations of the University of Washington Student Conduct Code (WAC 478-120). We expect that you will know and follow the UW's policies on cheating and plagiarism. Any suspected cases of academic misconduct will be handled according to UW regulations. For more information, see the College of the Environment Academic Misconduct Policy and the UW Community Standards and Student Conduct website:

<http://coenv.washington.edu/intranet/academics/academic-policies/academic-misconduct/>

Access and accommodation

It is crucial that all students in this class have access to the full range of learning experiences. At the University of Washington, it is the policy and practice to create inclusive and accessible learning environments consistent with federal and state law.

Full participation in this course requires the following types of engagement:

Course Component	Requirement(s)
Field travel	the ability to travel with a group in a foreign country for 3-4 weeks, to carry all necessary luggage, and to stay in modest shared accommodation (e.g., hostels); in addition to intercontinental travel, must be comfortable on medium-to-small commercial planes for 1-2 hour-long flights; additional transportation includes a large passenger ferry and a small (<30 passenger) boat; boat motion may cause seasickness; during travel, physical conditioning and ability to hike 2 miles on trails with regular stops/breaks over the course of 2 hours
Lecture	the ability to attend lectures at different locations during travel
Discussion	the ability to participate and also lead in discussion on topics given in advance of the discussion
Cross-cutting component	the ability to work in teams of 3-5 to complete assignments

If you anticipate or experience barriers to your learning or full participation in this course based on a physical, learning, or mental health disability, please immediately contact the instructor to discuss possible accommodation(s). A more complete description of the disability policy of the College of the Environment can be found [here](#). If you have, or think you have, a temporary or permanent disability that impacts your participation in any course, please also contact Disability Resources for Students (DRS) at: [206-543-8924](tel:206-543-8924) V / [206-543-8925](tel:206-543-8925) TDD / uwdss@uw.edu e-mail / <http://www.uw.edu/students/drs>.

Roles and Responsibilities

Student: inform the instructor no later than the first week of the quarter of any accommodation(s) you will or may potentially require.

Instructor and TA: maintain strict confidentiality of any student's disability and accommodation(s); help all students meet the learning objectives of this course.