History of Polar Discovery
Spring 2017
Credits: 1
Location: Copenhagen
Home Academic Program: Environmental Science of the Arctic
Optional Study Tour: Svalbard, Norway
Major Disciplines: Environmental Studies, Environmental Science, Political Science
Faculty Member: Trevor Popp, trevor@nbi.ku.dk
Program Directors: Neringa B. Vendelbo, nb@dis.dk
Assistant Program Director: Astrid Bonde, amb@dis.dk
Program Assistant: Rachel Frei, rf@dis.dk

Tuesdays 8:30–9:50, Frederiksberggade 24-403

Instructor:

Dr. Trevor Popp, Centre for Ice and Climate, Niels Bohr Institute, University of Copenhagen, trevor@nbi.ku.dk, phone (+45) 27 69 67 49. Trevor has a PhD in Geology from the University of Colorado, Boulder and works with isotopic analysis of ice cores and other archives for understanding abrupt climate and other environmental changes. He has more than two decades of experience as an expedition scientist and driller for ice core drilling projects in Greenland and Antarctica. Trevor works at the Centre for Ice and Climate at the Niels Bohr Institute of University of Copenhagen, which is a world-leading research group in ice core science.

Description of course:

We live in a time when most parts of the world can instantaneously communicate to almost all others, and at the same time with only a few comfortable clicks Google Earth can take us on a virtual tour of almost anywhere on our planet we would hope to explore. This is amazing! Yet, it amazes me further that it is still only a relatively short time ago that what existed at and near the polar regions was unknown, unmapped, mysterious, and mythical.

To our parent’s grandparents it was still not known that the interior of Greenland was covered by a huge ice sheet rather than a dense forest. It was a mystery what could be found beyond the ice masses that blocked entry towards a continent that may cover the South Pole…Antarctica. Was there a Northwest Passage that could be navigated through the icy Canadian Archipelago to shorten the trade route between Europe and Asia? It took legendary, heroic, insane, deadly (any number of adjectives could be applied) expeditions to answer these questions, by people who would become national heroes, and some anti-heroes. Much of this occurred only a few short decades before we were already putting humans in space and walking on the Moon.

This short course will take a look at some of these colorful people and expeditions, and their consequences and legacies. Highlights of the course include the role of Scandinavians, starting way back in time, much before our parents grandparents, with the Vikings passage across the North Atlantic, and then jump forward in time to the journeys of Norwegian explorers like Roald Amundsen and Fridtjof Nansen, and the Danish explorer Knud Rassmussen, who around the turn of the 20th century strove to be the first to reach the South Pole, to cross the interior of Greenland, and to learn of the cultures of the people found already living in the high Arctic. These stories will be examined together with, for example, those of the British explorers, Ernest Shackleton and Robert Falcon Scott, as they raced the Norwegians to reach the South Pole as part of the “Heroic age of Antarctic Exploration” from 1897 – 1922

This syllabus is subject to change.
Expectations of the students and teaching approach:

We meet for a few sessions, so your active engagement and interest in the subject is something that will enrich the class experience and make the course more enjoyable for you. An important aspect of the course will be to discover your own impressions and observations as we go deeper into the subject, so I will encourage you in that, in particular keeping in mind general themes such as resource exploitation, scientific justification, and the treatment of indigenous people. During your field study to Svalbard, I will also ask you to reflect on your experience in specific and creative ways that are intended to create heightened awareness of our surroundings.

The Polar Regions are places I know well, throughout which I have had fortunate opportunities to explore and discover over the last two decades, so can I offer my own direct experiences and recollections to color, personalize, and calibrate the relatively recent polar history, so please just ask.

Students are expected to:

- Participate in all activities
- Engage in discussions, ask questions, and contribute to achieving the learning objectives
- Respect the destination, the speakers, DIS staff, and your fellow classmates
- Represent yourself, your home university, and DIS in a positive light

Study tour: Svalbard, Norway

Svalbard, situated at 78 degrees north and halfway between mainland Norway and the North Pole, is home to untouched arctic wilderness. Since the 18th century, explorers have landed on Svalbard as the last stop before the North Pole. The islands remain very similar to the state in which the explorers may have discovered them, but like much of the Arctic is particularly vulnerable to the effects of climate change and sea ice loss, as well as geopolitics and resource exploitation. The archipelago only has 50km of paved roads and is home to an equal population of people and polar bears (3,000 of each). Besides some mining and the development of a few towns, Svalbard has remained untouched by heavy industry and thus is waiting to be explored. Outside of town, snowmobiles and dogsleds are the preferred form of transportation.

We will begin the journey in the capital of Longyearbyen and then venture out on boots, snowshoes, and snowmobiles. You will be divided into various sub-groups and each member will delve into a topic area to better understand the current issues surrounding the arctic. Whether it be geopolitics, the earth sciences, or capturing the arctic, you will visit organizations in Longyearbyen to gain a more nuanced understanding of the topic, and then together we will explore the snowcapped hills, frozen fjords, and glaciers of one of the last true wildernesses of Europe.

This optional study tour to Svalbard is an integral part of the History of Polar discovery class, as it provides you with the opportunity to make connections between topics covered in class and experiences in the field. We will harken back to the age of discovery, brave the arctic elements, and form an expedition team of our own to explore the Spitsbergen wilderness.

The group will be encountering the some of the same harsh conditions as when arctic explorers landed in Svalbard for the first time, therefore, this study tour is not for the faint of heart and best suited for those that have previous experience and enjoy the outdoors. Please bring proper artic weather clothing (winter jacket, snow pants, wool long underwear, hat, gloves, snow boots, scarf, etc.). Snowshoes and additional polar gear.
for extreme cold and wind will be provided, as necessary. Wildlife and the elements are a real danger in Svalbard, therefore when we are outside of the capital, we will be accompanied by an experienced, armed guide.

**Field Study:**

There will be a field study to visit Knud Rasmussen’s house outside of Copenhagen on Wednesday, January 25th from 13:00 – 17:00.

**Required Reading: Provided by DIS**

*The Coldest March: Scott’s Fatal Antarctic Expedition* by Susan Solomon. This award winning book chronicles one of the most epic tragedies of polar exploration and then offers an analysis of its fatal conclusion and the controversial man at its core. At the start of each chapter it offers the reader a modern view of visiting Antarctica before diving into what the experience was like for Scott and his party, and his Norwegian rivals, led by Roald Amundsen, a hundred years ago. We will read this together before our trip to Svalbard and devote time at the beginning of each class period for discussion.

Additional and/or supplemental reading may be assigned based on class interest and will be sorted for each class session. These will be available on Canvas.

**Evaluation/Grading:**

To be eligible for a passing grade in this class you must complete all of the assigned work. The overall grade will come from the following:

- Engaged course participation: 30%
- Svalbard Reflection assignment: 40%
- Final Paper: 30%

Specific guidelines and expectations for the Svalbard reflection assignment and final paper will be given in class. For the final paper, in principle it will consist of a 3-5 page essay of an agreed topic of the student’s choice. Find something interesting or unknown to you and dig into it. Because we meet only a few times, paper topics could be to go into greater depth to further develop one of the stories touched on during the course lectures. Other examples could include “Exploration for exploitation”, “Early contact with indigenous people”, “Tourism as modern exploration”, “Whaling in the Sub-Antarctic Islands”, “Mythology of the Polar Regions”, “Are there secret Alien bases in the Antarctic ice sheet?” ...(nearly) anything goes. A list of suggested resources will be provided for some topics, and in all cases you will be required to cite and share the source material used in developing your story. Be creative and have fun. The final paper topic can be selected anytime during the semester, but no later than March 7th.

**Disability and Resource Statement**

Any student who has a need for accommodation based on the impact of a disability should contact the Office of Academic Support (acad supp@dis.dk) to coordinate this. In order to receive accommodations, students should inform the instructor of approved DIS accommodations within the first two weeks of classes.
## Attendance Policies
You are expected to attend all DIS classes when scheduled. If you miss multiple classes the Director of Teaching and Learning, and the Director of Student Affairs will be notified and they will follow-up with you to make sure that all is well. Absences will jeopardize your grade and your standing at DIS. Allowances will be made in cases of illness, but in the case of multiple absences you will need to provide a doctor’s note. Arriving late to class is unacceptable and will affect your participation grade.

## Academic Honesty
Plagiarism and Violating the Rules of an Assignment
DIS expects that students abide by the highest standards of intellectual honesty in all academic work. DIS assumes that all students do their own work and credit all work or thought taken from others. Academic dishonesty will result in a final course grade of “F” and can result in dismissal. The students’ home universities will be notified. DIS reserves the right to request that written student assignments be turned in electronic form for submission to plagiarism detection software. See the Academic Handbook for more information, or ask your instructor if you have questions.

## Schedule of course activities:

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<thead>
<tr>
<th>Date</th>
<th>Topic</th>
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<tr>
<td>Tuesday, January 24th</td>
<td>Introduction --- Polar Mythology, Exploration, Exploitation, and Science; Intro to <em>Coldest March</em></td>
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<tr>
<td>Wednesday, January 25th</td>
<td>Field Study: Visit to Knud Rasmussen’s house and museum, Nordsjælland.</td>
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<tr>
<td>Tuesday, February 14th</td>
<td>Greenland: Vikings, Nansen, Rasmussen <em>(Last date for selecting final paper topic)</em></td>
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<td>Tuesday, February 21st</td>
<td>Through The Northwest Passage and to the North Pole: Nansen, Amundsen, Peary, Cook, and Franklin</td>
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<td>Tuesday, February 27th – March 3rd</td>
<td><em>Study tour to SVALBARD</em></td>
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<td>Tuesday, March 7th</td>
<td>The Heroic Age of Antarctic exploration and the race to the South Pole <em>(Coldest March: CHPT: 1 – 5)</em></td>
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<tr>
<td>Tuesday, March 14th</td>
<td>Antarctica: From Endurance to the Treaty <em>(Coldest March, CHPT: 6 – 11)</em></td>
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<tr>
<td>Tuesday, March 28th</td>
<td>The Scientific age and the future: Svalbard Reflection and Final Paper Due <em>(Coldest March, CHPT: 12 – end)</em></td>
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