Course Proposal for ENVS 1225
Arctic Climate and Policy: Winter Session in Bodø

Proposed Start Term: Winter Session 2020
Unit: Institute at Brown for Environment and Society
Primary Instructor: Lynch, Amanda H.
Primary Instructor Type: Voting Brown
Co-Instructor(s): None
Level Restrictions: None
Independent Study Offering: No
Variable Credit: No
Curricular Programs: No
Credit Value: 1.00
Grade Mode: Standard - ABC/No Credit
Transcript Title: Arctic Climate and Policy

Full Course Description:
The Arctic is a region where new opportunities to exploit natural resources, new trade routes and increasing human activities may have major consequences for the environment and society, and there is a great responsibility to ensure sustainable development in the face of rapid climate and social change. Current debates include issues of governance, discovery, access and use of mineral and hydrocarbon resources in the Arctic, possibilities for new maritime routes, cross-border cooperation, fisheries, opportunities for Arctic tourism development, as well as the support of indigenous communities and human resources in the Arctic.

The purpose of this course is to introduce this complex human-natural system in its context, using the example of Bodø, Norway as a natural laboratory. Readings will be provided prior to the study abroad component and must be completed before the first class meeting.

Students will travel to Bodø, Norway, to participate in this class together with undergraduates from Babson College, MA and Nord University Business School. Students will work together across disciplines and cultures to learn how to apply knowledge to map relevant policy issues more creatively, effectively, and responsibly.

Brown is committed to full inclusion of all students. Travel expenses will be covered by grants from the Brown Global Experiential Learning and Teaching program, the Institute at Brown for Environment and Society, and the National Science Foundation. Disabilities and other conditions that require accommodations or modifications to course requirements and procedures will be addressed as soon as they are brought to the instructor's attention. With this caveat, full participation in the abroad program is required.

This course has no prerequisites and fulfills an elective in the ENVS concentration. Enrollment in the course is for sophomore and junior undergraduates in any concentration, and by application and instructor approval only.
Class Restrictions: Sophomores and juniors
Repeat Limit: 0
Enrollment Limit: 6
Pre-Requisites: None
Associated Meeting Types: None

Banner Course Description (100 words)
The Arctic is a region where rapid climate and social changes will have important and far-reaching consequences. Current issues include access to mineral and hydrocarbon resources, possibilities for new maritime routes, cross-border cooperation, governance and self-determination, sustainability of fisheries, opportunities for Arctic tourism, and support of indigenous communities. Students will travel to Bodo, Norway, to participate in this class together with undergraduates from Babson College and Nord University Business School. Students will work together across disciplines and cultures to learn how to apply knowledge to map relevant policy issues more creatively, effectively, and responsibly.

Enrollment Application Process
BY OCTOBER 2, 2019, prospective students should submit by email to Professor Amanda Lynch (Amanda_lynnch@brown.edu) a maximum two-page application for enrollment that includes:

1. Name, year, concentration(s), GPA, and a specific bulleted list of courses that you have taken and grades earned that you believe prepare you for this course.
2. A bulleted list of activities that you have participated in that reflect your interest in the themes of coupled human-natural systems, sustainable development and climate change.
3. A narrative statement explaining why you are interested in the course and prepared for the experiential learning component in Bodo.

Priority will be given to students who have demonstrated interest by a record of scholarly and extracurricular activities, and will represent a diverse range of backgrounds and goals. Final enrollment will be confirmed by Prof. Lynch no later than October 18. Selected students must commit to register in writing and provide a copy of their current passport photo page so that flights can be booked before the end of October. Formal course registration opens on November 13, 2019.

Please keep in mind that the course enrollment will be capped at 6, and not everyone who applies will be accepted. Please feel free to reach out with any questions.

Learning Outcomes
Knowledge:
- understand the trajectories of observed climate change and variability in the Arctic;
- have a basic knowledge of European Arctic region development based on geopolitical, economic, and natural resource perspectives;
- have theoretical underpinnings of selected tools for complex policy analysis problems.

Skills:
- can apply knowledge from different disciplines in formulating and presenting basic images of the possible future;
• can analyze and discuss climatic and economic foundations for sustainable Arctic development.

General competence:
• can demonstrate their communication skills by providing convincing arguments about their own worldview;
• can display creativity in solving potential challenges and problems for sustainable development problems;
• can contribute to the innovative thinking about sustainable development in the Arctic.

Assessment
1. Participation: Instructions to students on the participation requirements are as follows:
Beyond expressing your own relevant thoughts, participation means listening to, responding to, and leaving room for others in the discussion. Understand that everyone will contribute in their own way. Whatever form they take, your contributions are an important part of your and your classmates' learning. The following guidelines should be kept in mind:
• be respectful, particularly when challenging other perspectives;
• be inclusive, and seek to avoid stereotypes;
• audacity supports learning, but hubris does not;
• expect yourself and others, including the instructors, to make mistakes.
Above all, be courteous - this includes arriving on time and prepared, limiting your use of mobile devices to break times, excusing yourself when you need to leave, and paying attention when others speak (individual work, 20%).

2. Reading reflection: To facilitate discussion and participation students will write reflections on your learnings at least twice during the time abroad. Short, focused reflections are encouraged, as are photographs. The reflections will raise important points for discussion or questions for clarification. Reflections may respond to a previous note by another student but they may not repeat the content of a previous note (individual work, 30%, <600 words total).

3. Report: A report will be assigned for students to work on during the trip to be submitted on the final day at Nord University. The paper will respond to a choice of three prompts, reporting on the context, decisions and processes relevant to the prompt, drawing on the readings (available on Canvas in advance and distributed on paper in Bodø) assigned prior to the class, and include an appraisal of possible policy alternatives (individual work, 50%, <3000 words).

Late submissions will not be accepted, except under documented emergency circumstances. Please read Brown University’s policies on academic conduct carefully. Handing in someone else’s work or ideas as your own (even if you worked on it together as a group) constitutes plagiarism, as does using someone’s ideas without appropriate citations. You must give a citation when you use an author’s ideas in your writing, even if you do not quote the text word-for-word. If you have any questions, please ask. Be informed and be careful.
Readings (to be finalized)


Optional general audience reading:


Class Outline and Itinerary (draft)

“There is the story of the drunkard searching under a street lamp for his house key, which he had dropped some distance away. Asked why he didn't look where he had dropped it, he replied, 'It's lighter here!'” (Kaplan 1964, p. 11)

<table>
<thead>
<tr>
<th>Day</th>
<th>Location</th>
<th>Activities</th>
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| Thu 2 | Boston | 1pm: US students meet at Logan airport  
4pm: Depart Boston |
| Fri 3 | Bodo | 2pm: Arrive Bodo  
5pm: local orientation and logistics for all students  
6pm: Class dinner and introductions with local students |
| Sat 4 | Reading reflections |
| Sun 5 | Optional: dog sledding day trip |
| Mon 6 | Nord University, Bodo | 11am: first class meeting  
Introduction to the Changing Arctic |
| Tue 7 | Peoples of the Arctic |
| Wed 8 | Principles of marine services and transport economics  
Arctic shipping trends, risks and management |
| Thu 9 | Arctic natural resources: geopolitics and self-determination  
Data analysis and group work |
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<thead>
<tr>
<th>Day</th>
<th>Travel</th>
<th>Event Details</th>
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<tbody>
<tr>
<td>Fri 10</td>
<td>Travel</td>
<td>Tour, Bodø Oil Terminal</td>
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<td>Hurtigruten for trip to Lofoten Peninsula. Presentation of Norwegian shipping industry onboard.</td>
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<tr>
<td>Sat 11</td>
<td>Svolvaer</td>
<td>Fisheries and tourism</td>
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<td>Board speed ferry to return</td>
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<tr>
<td>Sun 12</td>
<td>Bodo</td>
<td>Svartisen Glacier and Arctic Circle</td>
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<td>Mon 13</td>
<td>Nord University, Bodø</td>
<td>Environmental management: metrics and assessments</td>
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<td>Data analysis and group work</td>
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<td>Tue 14</td>
<td>Nord University, Bodø</td>
<td>Disasters under climate change at the Nord Preparedness Management Lab</td>
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<td>Data analysis and group work</td>
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<tr>
<td>Wed 15</td>
<td>Center for High North Logistics</td>
<td>Data analysis and group work</td>
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<tr>
<td>Thu 16</td>
<td>KPMG and Ernst &amp; Young office visits</td>
<td>Data analysis and group work</td>
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<td>Fri 17</td>
<td>Discussion and reflection</td>
<td>Preparing for departure</td>
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<td>Sat 18</td>
<td>4:30am: US students depart for Bodø airport, 7am departure 7pm: Arrive at Boston Logan airport</td>
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It is expected that pre-reading and note-taking will require around 50 hours before the start of the Wintersession. Class time, primarily at Nord University but also at the Center for High North Logistics, the Nord Preparedness Management Lab and in Svolvaer, will comprise around 55 hours. Field trips on the Hurtigruten, to Svartisen Glacier, to KPMG and other local firms, and Bodø Oil Terminal will comprise 28 hours. Data analysis and group work, and other out-of-class work such as learning reflections, are estimated at around 48 hours.