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## Local News

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### Arctic 101: UW degree to prep students for a melting world

The University of Washington is launching a new initiative to boost research in polar regions and prepare students for a world where melting ice is opening new opportunities — and posing new threats.

By Sandi Doughton

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With the planet's polar regions changing faster than ever before in human history, the University of Washington is launching a new initiative to boost research in the Arctic and prepare students for a world where melting ice is opening new opportunities — and posing new threats.

Under the Future of Ice program, the university will hire eight scientists and faculty members and offer the country's first Arctic studies minor outside of Alaska.

The inaugural course, which starts this month,

filled up in less than two weeks.

"The student interest has been phenomenal," said Nadine Fabbi of the UW's Jackson School of International Studies.

Partly because of Seattle's strong ties with Alaska, the UW has long been a world leader in polar research. But with several veteran scientists retiring and other institutions moving into the field, the new initiative will help the university expand and retain its leadership role, said Axel Schweiger, director of the UW Polar Science Center.

Interest in the planet's coldest places is reaching a fever pitch, added anthropologist Ben Fitzhugh, co-director of the initiative. Climate change is rapidly reshaping landscapes, ecosystems and traditional ways of life. New sea routes are opening up, and oil companies are preparing to build offshore rigs in once-inaccessible waters.

"There are things happening in the Arctic that have never happened before in the history of human society," Fitzhugh said. "It's going to bring a lot of pollution, it's going to bring a lot of investment, it's going to bring a lot of employment."

China, India and other nations that don't have territory in the Arctic are clamoring for a role there, alongside the eight countries that do. Well-organized groups of indigenous people are making their voices heard when it comes to development and exploitation of natural resources.

In many ways, the region represents a unique opportunity to anticipate the ecological and social problems development will bring, and — perhaps — avoid them, Fitzhugh said.

One goal of the UW initiative is to bridge the gap between natural and social science and develop tools for people who live or work in the Arctic, Schweiger explained. For example, UW scientists are working on ways to forecast sea-ice coverage, which could be valuable to military vessels, fishing fleets and oil-drilling operations.

“There’s a lot to be learned that will be useful to people,” he said.

Bringing together experts from diverse fields like law, communications, policy and oceanography will also help the UW compete for federal grants as well as funding from private foundations, Schweiger added.

The initiative has already helped one team of UW scientists win a \$200,000 grant from Microsoft co-founder Paul Allen. Their goal is to design, build and deploy an autonomous instrument that will float underneath sea ice and measure its thickness and other properties.

Students who opt for the new minor in Arctic studies will learn about science of climate change, but also about the people who live in the northernmost nations, their cultures and the political dynamics in the region, Fabbi said.

“This is a brand-new area of study at the UW. We had to start from scratch.”

The UW is earmarking about \$1 million a year over the next four years to the initiative, which will help pay salaries for faculty members and sponsor workshops, starting with one this spring to determine research priorities.

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