

## More Than Just Polar Bears:

# A system-wide interdisciplinary approach to connecting Maine with the Arctic

Faculty:

Dr. Michael Curran, Dr. Kaisa Holloway Cripps, Dr. Leo Trudel

(UMFK)

Students:

Katie Westbrook (UMaine), Jamal Khan and Younes Iggoute (UMFK)

## Picture the Arctic In Your Mind







#### **The Arctic Circle**

#### AGREEMENT ON ENHANCING INTERNATIONAL Approximate Extent of Identified Geographic Areas ARCTIC SCIENTIFIC COOPERATION 62°N NON-BINDING ILLUSTRATIVE MAP - - - Arctic Circle This non-binding illustrative map shows the approximate extent Additional areas covered of the Identified Geographic Areas described in Annex 1 of voluntarily by Canada the Agreement on Enhancing International Arctic Scientific Cooperation. It is intended for illustrative purposes only \*Continental shelf areas are not depicted.\* and does not form part of the Agreement. U.S. Department of State, OES/OPA, April 12, 2019



## Why Maine + Arctic?

- Maine and Alaska closest US states to Arctic
- Environmental change opening transportation routes and opportunities
- New "Cold War" emerging in region
- Environmental change affecting Maine's oceans and fish stock

## About the Research Project

- Student and Faculty inquiry into program design and how it will inform research priorities, develop strategies to address structural changes in the Arctic, and implement solutions to benefit both Maine and the polar region of the Arctic.
- Benchmarked existing Arctic and Circumpolar programs across the globe, identified knowledge, skills and abilities needed to work and engage in field work and careers in the circumpolar region, and inventoried UMS and global opportunities
- Goal: To build a transdisciplinary collaborative learning model for students and professionals to understand, evaluate and create solutions to engage in various fields of study in the Arctic region.
- Funded by the University of Maine System Office of Research Development Research Reinvestment Fund Planning Grant.

#### UMS FACULTY BY INTERDISCIPLINARY THEME N=67



People and Cultures
Business and Economies
Security and Governance
Land and Environment

#### Arctic Related Programs and Courses, US



### Programs by UMFK Theme and Total with Arctic Programming



Total Programs with Arctic Focus (Excluding UMFK)

#### JOB OPENINGS BY UMFK INTERDISCIPLINARY THEME N=56







#### Knowledge, Skills and Abilities Required



sentation, Communication, Verbal and Oral Skills

10% 20% 30% 40% 50% 60% 70% 0% 80% 90% 100%

## Curriculum

- Need to bolster security and governance, along with people and cultures, and business and economies, knowledge, skills and ability in our courses
- Security clearance is important to many future careers
- Diplomacy and communication a key skill for Arctic related skills
- Applied experience is important

## About UMFK Arctic Studies

- Interdisciplinary undergraduate program
- Launched in 2022
- Connects with UMaine Arctic Initiative
- Connects Maine with Arctic
- Earn an Arctic Studies certificate
- Earn an Arctic Studies minor in UMFK undergraduate bachelor programs

## About UMFK Arctic Studies

Four key interdisciplinary themes:

- Land and Environment
- Security and Governance
- People and Cultures
- Business and Economies

## Framework for UMS Arctic Studies

- Online core courses offered to a broad audience
- Applied experience with one of several UMS or related expeditions
- Offer Research Expedition Microcredential to ensure skills for field work





## Learning Outcomes

- Demonstrate proficient knowledge in the land and environment of the Arctic region;
- Demonstrate proficient knowledge in the diversity of the indigenous and living people and cultures of the Arctic region;
- Demonstrate proficient knowledge in contemporary governance, security, business and economic issues in the Arctic region;
- Leverage technology to perform analyses of Arctic social and science research and data sets;
- Demonstrate the capacity to develop research questions, conduct research independently or through an affiliation and demonstrate an awareness of Arctic research and issues;
- Demonstrate the ability to present in writing and orally on Arctic topics in an area of interest.

### Future Arctic Studies

The Arctic is "a serious national security issue" and

"something we ignore at our peril"

- Maine Senator, Angus King

## Thank you + Contact Information

Dr. Michael Curran, Assistant Professor of Business, University of Maine at Fort Kent, michael.curran1@maine.edu

Dr. Kaisa Holloway Cripps, Assistant Professor of Business, University of Maine at Fort Kent, kaisa.holloway@maine.edu

Dr. Leo Trudel, Associate Professor of Business, University of Maine at Fort Kent, leo.trudel@maine.edu

Katie Westbrook (presenter) (student), Earth and Climate Science, '23, University of Maine at Orono