Department of Earth, Ocean & Atmopspheric Sciences (EOAS) + Department of Curriculum & Pedagogy (EDCP) Student-Curated Informal Learning and Engagement Spaces (SCI-LEnS) Kirsten Hodge (EOAS), Oli Beeby*, Ruth Moore*, Raveen Sidhu*, Emma Betz, Laura Lukes (EOAS), Shandin Pete (EOAS), David Anderson (EDCP) *student co-developer

what is Control of the second second

This project aims to produce a unique graduate course to UBC aimed at training science graduate students in effective science communication and outreach, with a particular focus on utilizing museums as spaces for exploring best practices for sharing science with the public.

that sounds cool!

tell me more about the course!

sure! the course will...

Train the next generation of researchers to be dynamic and engaging science communicators.

Equip graduate students to deliver complex, cutting-edge science to public audiences, peers, colleagues and the boarder science community.

Bridge the gap between complex scientific work and the public, bringing UBC research to public audiences in informal learning environments.

Centre the student learning on museum visits, case studies, class discussion, collaboration, and dialogue with experts.

our course modules

#1 Foundations of Effective Science Communication

Scientists as Storytellers, Understanding your Audience and Yourself, **Reconcilliation in Science: Principles & Practices, Communicating with** Kids & Teens, Controversy, Uncertainty, & Science as political action.

#2 Digital Storytelling & Science Journalism

Communicating Science through New Media, Science Journalism & Publishing for the Public

#3 Exhibit Design & Evaluation

Museums & Design Strategy, Exhibit Design Essentials **Evaluating Exhibit Success and Impact**

#4 Creating & Evaluating Public Science Programs

Crafting Informal Learning Experiences, Launching Science into the Community

how will student learning be assessed?

Elevator Pitch: Students give a 3-minute research pitch. Pitches and visuals are revised based on feedback, self-evaluation, and module 1 learnings.

Student-facilitated Seminar: Students pick a syllabus topic, summarize a recent article, present and lead discussion

Class participation: Students will be expected to participate in weekly in-class discussions.

exhibit of their choosing using skills learned in Unit 3.

Outreach activity: Students will develop an outreach activity with the option to showcase it at a student-curated event in Pacific Museum of Earth for UBC community and public.







what else can students expect?



Peer-to-peer teaching Students will lead the class in discussion and exploration of course learning topics, encouraging active participation and critical thinking.



Field trips to Museums and Exhibit Design Firms Students will explore science communication in action through visits to local museums and exhibit design firms, engaging with experts in the field.

our team



Oli Beeby 4th Year, Bachelor of Media Studies



Dr. Kirsten Hodge Director, Pacific Museum of Earth, EOAS



Ruth Moore MSc Student Geophysics



Dr. Laura Lukes Assistant Professor, EOAS



collaborations & consultations

Sandy Eix | Science World **Tom Cummins** | Science World Michael Fairchild-Simms | Science World Yukiko Stranger-Galey | Barker Langham Jackie Chambers | Beaty Biodiversity Museum **Derek Tan |** Beaty Biodiversity Museum **Jill Baird** | *Museum of Anthropology*

Skooker Broome | *Museum of Anthropology* **Catherine Po |** NGX ngx Dr. Danielle Ignace | UBC Indigneous Scholar Kallie Moore | University of Montana **Wylee Fitz-Gerald** | UBC Indigenous Consultant Richard Campbell | Musqueam Knowledge Keeper **Dr. Eileen van der Flier-Keller** | Simon Fraser University

Museum field trip evaluation activity: Students will go on a field trip to one of the course's partner institutions and evaluate an







Student-curated outreach event Students will have the option of showcasing their outreach activity at the Pacific Museum of Earth, sharing their science stories with audiences of all ages a unique opportunity to engage with the public in a fun and non-indimidating space.



Raveen Sidhu 4th Year BSc, Microbiology + Oceanography

> **Dr. Shandin Pete Assistant Professor**, EOAS



Emma Betz, PhD Candidate **Geological Sciences**



Dr. David Anderson Professor, EDCP



MOA





pacific museum of earth



science.

development and sustainability.

development and educational messaging.

academic endeavors.



- **Experiential Learning:** The course emphasizes hands-on learning, with students creating and building as core learning objectives.
- Student-Curated Informal Learning Space: An annual outreach event at UBC highlighting cutting-edge science, inspiring visitors to discover the value of
- **Cross-Faculty Collaboration:** The project brings together experts in museum outreach, education, and exhibit design to strengthen the course's
- Incorporating Indigenous and Decolonial Perspectives: UBC Indigenous scholars have provided guidance on incorporating Indigenous Knowledge into the course and centring decolonizing the sciences.
- **Pedagogical Exploration:** Students will explore the pedagogical dimensions of museum exhibitions and work with scholars on contemporary exhibition
- **Public Engagement:** The course aims to shift the lens through which scientists engage with the public, inviting the community into the museum to share