CURRICULUM VITAE

SHANNON E. FARGEY

Assistant Teaching Professor Department of Geography University of Victoria

1. DEGREES AND DIPLOMAS

Degree	Field	Institution	Year Granted
B.Sc	Environmental Science	University of Calgary	2005
M.Sc	Geography	University of Calgary	2007
Ph.D	Environment and Geography	University of Manitoba	2014

Title of PhD Dissertation: Characterization of orographic cloud and precipitation features over southern Baffin Island and surrounding area

2. POSITIONS HELD

2017 – present	* Assistant Teaching Professor – Dept. of Geography	University of Victoria
2014 - 2017	Assistant Teaching Professor (limited term) – Dept. of Geography	University of Victoria
2012 - 2014	Sessional Instructor - Dept. of Environment and Geography	University of Manitoba
2011 - 2012	Sessional Instructor – Dept. of Geography	Brandon University
2008 - 2009	Network Manager – Storm Studies in the Arctic	University of Manitoba
2005 - 2007	Project Manager – Foothills Climate Array	University of Calgary

^{*} Parental Leave December 2019 to June 2021

3. MAJOR FIELD(S) OF SCHOLARLY OR PROFESSIONAL INTEREST

Mountain Meteorology, Experiential and Field School Pedagogy, Hydrology

4. MEMBERSHIPS AND OFFICES HELD IN LEARNED AND PROFESSIONAL SOCIETIES

Member, Canadian Association of Geographers (CAG)	2022 to present
Member, Canadian Water Resources Association (CWRA)	2017 to 2019
Student Member, American Meteorological Society (AMS)	2010 to 2014
Student Member, Canadian Meteorological and Oceanographic Society (CMOS)	2006 to 2014

5. SCHOLARSHIPS, FELLOWSHIPS, HONOURS, AND AWARDS

a. From the University of Victoria

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	Learning and I	i eaching	Strategic	Initiative	Onen	Education	Resource	Carant ()	vici

Learning and Teaching Strategic Initiative Open Education Resource Grant (UVic) *Co-Applicant: Crystal Huscroft (Thompson River University)*\$5,000 2019-2022

Introduction to Earth System Science (an Introduction to Physical Geography Online Text)

Learning and Teaching Strategic Initiative Indigenous Grant (UVic) \$5,000 2018-2019

Co-PIs: Rosaline Canessa, Cameron Owens

Decolonizing and Indigenizing the Geography courses in the Clayoquot Sound Field Semester

Faculty of Social Sciences Indigenous Resurgence Fund (UVic) \$1,500 2018-2019

Co-PIs: Rosaline Canessa, Cameron Owens

Decolonizing and Indigenizing the Geography courses in the Clayoquot Sound Field Semester

Watershed Protection and Management Division, Capital Regional \$15,000 2018 District (CRD)

Sooke Watershed Precipitation Array – Improved observation of hydrological inputs in dense canopy cover and orographic enhancement of precipitation in the drinking water source region for the greater Victoria region. Grant <u>in-kind</u> to purchase equipment and installation infrastructure)

b. Prior to Appointment at University of Victoria

National Sciences and Engineering Council (NSERC) Post Graduate Scholarship D3, University of Manitoba	\$63,000	2009-2011
University of Manitoba Graduate Fund, University of Manitoba	\$32,000	2007-2008
Northern Studies Training Award/Scholarship for participation in the Storm Studies in the Arctic field project, Iqaluit, Nunavut	\$2,555	2007
Alberta Graduate Research Scholarship, held at the University of Calgary	\$2,000	2006
Queen Elizabeth II Scholarship, held at the University of Calgary	\$9,300	2006
Best Student Poster Award - Canadian Meteorological and Oceanographic Society (CMOS) 40th Annual Congress	\$1,000	2006
University of Calgary Graduate Student Award	\$2,000	2007

6. SCHOLARLY ACHIEVEMENTS

a. Articles Published in Refereed Journals

*student author

- Wild, A*., Kwoll, E., Lintern, G., and S. Fargey. Fluvial Response to Climate Change in the Pacific Northwest: Skeena River Discharge and Sediment Yield. *Water.* 15 (1), 167.
- 2019 Wood, W.H., Marshall, S.J, and S.E Fargey. Daily measurements of near-surface humidity from a mesonet in the foothills of the Canadian Rocky Mountains, 2005-2010. *Earth Systems Science Earth Systems Science Data*, 11, 23-34.
- Wood, W.H., Marshall, S.J, Whitehead, T.L and S.E Fargey. Daily temperature records from a mesonet in the foothills of the Canadian Rocky Mountains, 2005-2010. *Earth Systems Science Data*, 10, 595-607.
- Fargey, S., Henson, W., Hanesiak, J. and R. Goodson. Characterization of an unexpected snowfall event in Iqaluit, Nunavut and surrounding area during STAR. *Journal of Geophysical Research Atmospheres*, 19, 5492-5511.
- Fargey, S., Hanesiak, J., Stewart, R. and M. Wolde. Aircraft observations of orographic cloud and precipitation features over southern Baffin Island, Nunavut, Canada. *Atmosphere-Ocean*, 52, 54-76.

- Gordon, M., Biswas, S., Taylor, P., Hanesiak, J., Melzer, M. and S. Fargey. Measurements of Blowing Snow at Iqaluit, Nunavut, Canada during the STAR Project. *Atmosphere-Ocean*, 48, 81-100.
- 2010 Hanesiak, J., Stewart, R., Taylor, P., Moore, K., Barber, D., McBean, G., Strapp, W., Wolde, M., Hudak, D., Scott, J., Liu, G., Gilligan, J., Biswas, S., Dyck, R., Fargey, S., Field, R., Gascon, G., Gordon, M., Greene, H., Hay, C., Henson, W., Hochhien, K., Leplante, A., Albarran-Melzer, M. and S. Zhang. Storm Studies in the Arctic: Meteorological Field Project. *Bulletin of the American Meteorological Society*, 91, 47-68.

b. Other Publications

- 2014 Fargey, S., Hanesiak, and R. Goodson. An Evaluation of Vertical Profiles using a limited area numerical weather prediction model over Baffin Island and surrounding area during autumn 2007. Prepared for the Applied Environmental Prediction Science Prairie and Northern Division, Environment and Climate Change Canada, Edmonton, Alberta.
- Fargey, S., Hanesiak, J., Liu, G., Stewart, R., Hochheim, K., Gordon, M., Taylor, P., Henson, W., LePlante. A., McBean, G., Strapp, W., Vukovic, Z and M. Wolde. 2011. Storm Studies in the Arctic Data Report. Centre for Earth Observation Science, University of Manitoba, Winnipeg, Manitoba.

c. Conference Presentations and other

- Fargey, S. Anatomy of Storm, *Raincoast Education Society Community Lecture Series*, Tofino, BC. Jan 31st, 2018.
- Fargey, S. Towards improved characterization of clouds and precipitation in the eastern Canadian Arctic using a research aircraft. *Department of Geography Seminar Series*. University of Victoria. February 25, 2015.
- Fargey, S. Evaluating GEM-LAM in the eastern Canadian Arctic. *End of Season Forecaster's Workshop, Environment and Climate Change Canada, Edmonton, Alberta. October 2014.*
- Fargey, S., Hanesiak, J. and R. Goodson. An evaluation of vertical profiles using a limited area numerical weather prediction model over southern Baffin Island and surrounding area during autumn 2007. *American Meteorological Society 15th Mountain Meteorology Conference*. San Diego, CA, USA. August 18 - August 22, 2014.
- Fargey, S., Henson, W., Hanesiak, J. and R. Stewart. Influence of topography on a snowfall event in Iqaluit, NU, with comparisons to GEM-LAM. *American Meteorological Society 14th Mountain Meteorology Conference*. Steamboat Springs CO, USA. August 20-24, 2012.
- 2012 Fargey, S. and S. Marshall. Surface Meteorological Observations of Upslope Cyclonic Precipitation Events in the Eastern Slopes of the Canadian Rocky Mountains. *American Meteorological Society 14th Mountain Meteorology Conference*. Steamboat Springs CO, USA. August 20-24, 2012.
- 2010 Fargey, S., Hanesiak, J., Strapp, W., and M. Wolde. Measurements of Orographic Cloud and Precipitation over Southern Baffin Island. *American Meteorological Society 13th Conference on Mountain Meteorology*. Squaw Valley, CA, USA. August 30 September 3, 2010.
- 2010 Fargey, S., Hanesiak, J., Strapp, W., and M. Wolde. Characteristics of Orographic Cloud and Precipitation in the Arctic during STAR. *American Meteorological Society 13th Cloud Physics* Conference. Portland, Oregon, USA. June 28 July 2, 2010.

- 2010 Fargey, S., Hanesiak, J., Martin, R., Strapp, W., and M. Wolde. A Summary of Results: Characteristics of Upslope Precipitation in the Arctic during STAR. STAR Final Workshop. Winnipeg, MB, Canada. June 14-15, 2010.
- 2010 Fargey, S., Hanesiak, J., Martin, R., Strapp, W., and M. Wolde. 2010. Characteristics of Upslope Precipitation in the Arctic during STAR. *Canadian Meteorological and Oceanographic Society 43rd Annual Congress*, Ottawa, ON, Canada. May 30-June 4, 2010.
- 2009 Fargey, S. and J. Hanesiak. Upslope Precipitation Features in the Canadian Arctic. *MOCA International Association of Meteorology and Atmospheric Sciences (IAMAS)*, Montreal, QC, Canada. July 19-29, 2009.
- 2009 Fargey, S. and J. Hanesiak. Characterization of Upslope Precipitation in the Eastern Canadian Arctic, using a Research Aircraft. UK Polar Network, Atmospheric Workshop, Cambridge, England. April 28-May 1, 2009.
- Fargey, S and S. Marshall. Relating the frequency and distribution of southwestern Alberta storm events to seasonal rainfall patterns. *Canadian Meteorological and Oceanographic Society, 41st Annual Congress.* St. Johns, Nfld, Canada. May 28-June 1, 2007.
- Fargey, S. and S. Marshall. Spatial Evaluation of storm processes in southwestern Canada, with links to seasonal rainfall patterns. *European Geophysical Union, General Assembly*, Vienna, Austria, EU. April 15-20, 2007.
- 2006 Fargey, S. and S. Marshall. Spatial-Temporal Evolution of 2005 June Cyclonic storm events in southwestern Alberta using the Foothills Climate Array meteorological network. *Canadian Meteorological and Oceanographic Society, 40th Congress.* Toronto, ON. May 29- June 1, 2006.

8. TEACHING SUMMARY

a. Summary of Course Offerings and Numbers

Course Number	Course Title	Institution	Number of Times Taught	Enrollment	Level
	Physical Ge	eography Cour	ses		
GEOG 103, GEOG 1290, GEOG 170	Introduction to Physical Geography	UVic, UM, BU	12	14-198	1st year
GEOG 2540	Weather and Climate	UM	1	60	2 nd year
GEOG 313	Field Studies in Mountain Meteorology	UVic	2	16*-20	3 rd year
GEOG 370	Hydrology	UVic	4	57-75	3 rd year
GEOG 391	Coastal Meteorology field school	UVic	2	20	3 rd year
GEOG 391	Mountain Meteorology	UVic	2	23-28	3 rd year
GEOG 4390/ GEOG 7440	Global Climate Change	UM	1	6	4 th year/ Graduate
GEOG 477	Field Studies in Physical Geography ¹	UVic	2	12	4 th year
GEOG 484	Advanced Studies in Weather and Climate	UVic	1	10*	4 th year
GEOG 491 A01	Exploring Hydrological Processes: from theory to practice field school	UVic	1	11	4th year
GEOG 491 A02	From Microclimate to Climate Change <i>field school</i> ²	UVic	1	12	4th year
	Geoma	ntics Courses			
GEOG 222	Introduction to Maps and GIS	UVic	3	80-129	2 nd year
GEOG 328	GIS Analysis	UVic	11	46-55	3 nd year
GEOG 329	GIS Applications and Tools	UVic	1	49	3 nd year
GEOG 323, GEOG 286	Cartography	UVic, BU	3	40-72	3 rd year/ 2 nd year
GEOG 418/ GEOG 518	Advanced Spatial Analysis and Spatial Statistics	UVic	1	50	4 th year/ Graduate
	Environmental	Geography C	ourses		
GEOG 101A	Environment, Society and Sustainability	UVic	1	110	1st year
GEOG 314	Global Environmental Change and the Human Response	UVic	3	20-73	3 rd year
GEOG 339	Disaster Management and Community Resilience	UVic	2	25-30	3 rd year
	Miscellaneous Geog	raphy and Oth	ner Courses		
GEOG 315	Geocaching	UVic	8	50-60	3 rd year
GEOG 490	Directed Studies	UVic	6	1	4 th year
GEOG 499A	Honours Thesis	UVic	2	10-16	4th year
GEOG 499B	Honours Thesis	UVic	2	1-16	4 th year
CSC 497	Computer Science Interdisciplinary Project	UVic	2	1	4th year

¹Co-Lecturer with Dr. Dan Smith (2019 offering); ²Co-Lecturer with Dr. Johannes Feddema
UVic = University of Victoria, UM = University of Manitoba, BU = Brandon University; *Enrollment as of October 2022

b. Undergraduate Supervision Directed Studies, Honours Student and Computer Science Interdisciplinary Projects

Student	Subject	Course	Year
Carson Jamieson	Irrigation Analysis in British Columbia	CS Interdisciplinary Project	2022
Samantha Hill*	Wildfire Effects on a British Columbia Watershed	CS Interdisciplinary Project	2022
Jaymie Fletcher ¹	Karst Hydrology	Directed Studies	2021
Sarah Jenson ¹	Karst Hydrology	Directed Studies	2021
Emma Shupaski	Using GIS to analyze habitat use of humpback whales (<i>Megaptera novaeangliae</i>) in the Northern Georgia Strait of British Columbia	Honours Student	2021-2022
Hannah Meyer	Geodatabase Management in GIS	Directed Studies	2021
Alexander Moorman*	Advanced Studies in Glaciology	Directed Studies	2019
Cody Milne	Advanced Field Studies in Alpine Weather and Climate	Directed Studies	2019
Pawa Haiyupis*	Decolonizing the Clayoquot Sound Field Semester Curriculum	Directed Studies	2018
Amanda Wild*	Modelling the Skeena River: Estimated discharge and sediment load at the Skeena River mouth and associated implications for the Skeena Estuary	Honours Student	2017-2018
Charlotte Ballantyne*	Modelling Climate Change Impacts on Lodgepole Pine Populations in British Columbia	Honours Student	2017-2018

^{*}Moved on to pursue a Graduate Degree

c. Graduate Supervision

2021 to present Daniel Gardeuno Ruiz (PhD) My Role: Committee Mem

Supervisors: Colin Goldblatt and Ann-Sofie Ahm (Earth and Ocean Sciences)

2019 to 2022 Parnian Rezania (MSc) My Role: Committee Member

Supervisor: Randall Scharien (Geography)

9. ADMINISTRATIVE ACTIVITIES AND SERVICE

a. University and Faculty Committees

2018 to 2019	Undergraduate Curriculum Committee, Faculty of Social Sciences, Committee Member
2018 to 2019	K-12 Modernization University Assessment, Math/Science & Numeracy Curriculum
	Subgroup, Committee Member
2019	Canada Research Chair in Global Water Sustainability, Faculty of Engineering,
	Search Committee Member
2018 to 2019	Renewal of Civil Engineering Accreditation by the Canadian Engineering, Faculty of
	Engineering
2017	New Student Orientation, Faculty of Social Sciences, Presenter

¹Co-Supervised with Jill Krezoski

2016 to 2017 Renewal of Civil Engineering Accreditation by the Canadian Engineering Accreditation Board, Faculty of Engineering

b. Department Committees and Responsibilities

2022 to present	Department Representative - Co-op Liaison
2021 to 2022	Search Committee Member, Geomorphologist Faculty Position
2018 to 2019	Chair, Undergraduate Affairs Committee, Dept. of Geography
2019	Academic Advisor, Department of Geography
2019	Search Committee Member, Physical Geography Senior Laboratory Instructor
2018	Co-host and Organizer, Geography Articulation Meeting of British Columbia, Victoria,
	BC, May 3-4, 2018
2018	PhD Candidacy Examination Chair, Dept. of Geography
2017 to 2019	Faculty Representative, Geography Articulation of British Columbia
2017 to 2019	Faculty Representative, Society of Undergraduate Students (SOGS)
2017 to present	Member, ARPT Committee
2016 to present	Member, Undergraduate Affairs Committee
2016 to present	Member, Field School Committee, Dept. of Geography
2016 to 2017	Faculty Participant, Programpalooza
2016	Search Committee Member, GIS Assistant Teaching Professor (limited term)

b. Professional Service and Responsibilities

2021 to 2023 2018 to 2019 2017 to 2018	Co-Chair – Geography Articulation of British Columbia Chair - Geography Articulation of British Columbia Project Manager - Canadian Water Resources Association (CWRA) National Conference,
2017	Victoria, BC, May 22-25, 2018. Referee - Toronto University Press, Understanding Climate Change: from Policy to Practice
2017	(proposal for 2nd edition), By Sarah Harris and Sarah Burch *Referee - Wiley Publishing, Discovering Physical Geography, By Alan Arbogst
2016	Referee - Pearson Publishing, Applied Physical Geography: Geosystems in the Laboratory, 9th Edition, By Charles Thomsen and Robert Christopherson
2014-2015 2014-2015.1	Journal of Geophysical Research – Atmospheres Atmosphere-Ocean

c. Education and Science Symposiums: K-12

2019	Presenter, 'How 'Geography' is used to monitor and manage Environmental Change',
	Claremont Secondary School, Victoria, BC
2017 to 2018	Senior Level Judge, Vancouver Island Regional Science Fair, Elementary and Middle
	School (Grades 4 to 8), Victoria, BC
2015	Presenter, 'What is Weather?', Elementary School Level (Grade 4), Victoria, BC
2012 to 2014	Presenter, 'How basic math principles to monitor climate change', as part of the Math
	Inquiry Symposium, Middle School Level (Grades 6-8), Winnipeg, MB
2012	Presenter and Session Organizer on the 'Science of Climate Change Research' at the
	International Student Science Fair (ISSF), Middle School and High School Level (Grades 6 -
	12), Winnipeg, MB
2011 to 2012	Senior Level Judge, Manitoba Schools Science Symposium, Middle School Level (Grades 6-
	9) Winnipeg, MB
2010	Senior Level Judge, Canada Wide Science Fair, Middle School and High School Level
	(Grades 6 -12), Winnipeg, MB
2008 to 2010	Presenter and Session Organizer for 'Techniques in Meteorological Field Data Collection',
	Arctic Field Student Day, High School Level (Grades 11-12), Winnipeg, MB

10. PEDAGOGICAL AND PROFESSIONAL DEVELOPMENT

a. Certificate/Courses

- 2021 Indigenous Canada, Faculty of Native Studies, MOOC
- 2015 Faculty Institute of Teaching Certificate from the University of Victoria Learning and Teaching Centre

b. Training

- 2018 Undergraduate and Graduate Advisor Program, from the University of Victoria
- 2017 Racialization and Privilege in the Classroom Training, from the University of Victoria, Faculty of Social Sciences
- 2016 Indigenous Cultural Acumen Training, from the University of Victoria, Faculty of Social Sciences
- 2016 Everything you need to know about ArcGIS Maps for Office, ESRI Educational Training

c. Workshops - Learning and Teaching Support and Innovation Centre

- 2022 Grading: Why and how?
- 2022 Facilitation and the Reflective Process in Experiential Learning
- 2019 Letters of Recommendation that can Help or Hurt You or Others
- 2018 Bringing the Kitchen Table to Academia: Decolonizing Conversations in the Classroom
- 2018 The Magic of Rubrics: Design, Implementation and Calibration
- 2018 Constructing Effective Statements of Intended Learning Outcomes for Grant Recipients
- 2017 Teaching towards and drawing from community-engaged learning
- 2017 Out there learning: critical reflections on off-campus study programs (field courses)
- 2017 Teaching for Critical Thinking
- 2017 Beyond Accommodation: Creating an Equitable Classroom for Students Experiencing Disability
- 2016 Reports from the Field: Sharing Stories from Recent Field Schools
- 2016 Designing Effective and Efficient Assessment
- 2016 Field School Design
- 2015 Developing a Teaching Dossier
- 2014 Embracing Diversity in the Digital Age: The New Normal of our Times
- 2014 Universalizing Student Success
- 2014 Ensuring Students Read and are Prepared for Class
- 2014 Confronting Challenges and Relishing the Rewards
- 2012 Using digital technology in the classroom
- 2012 Encouraging student engagement