INFO 6100 – Information in Public Policy and Decision Making
Winter 2024

Cross-listed: ENVI 6100 and PUAD 6150
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COURSE DESCRIPTION

INFO 6100 (ENVI 6100 & PUAD 6150) addresses the question of how information is used in policy making at local, national, and international levels. While modern policy making prescribes the use of the best available information, evidence-based policy making is relatively new and challenging due in part to the large quantities and types of information that could inform decisions. This course will examine the role of information, arising primarily from various research and knowledge domains, in policy decisions, and will give particular attention to the interface between research and policy decisions. The course will draw on research-based case studies to illustrate enablers and barriers affecting the use and influence of information.

The objectives of this course are to:

1. Introduce the concept and practices of evidence-based policy and decision-making;
2. Identify current-day practices in the production (types and format) and communication of research-based information;
3. Outline and describe activities at the research-policy interface (often labelled, science-policy interface), particularly regarding information pathways;
4. Introduce and describe methods of assessing the complex phenomenon of the use and influence of research-based information and publications;
5. Identify and assess knowledge management practices applicable to policy and decision-making contexts; and
6. Identify and assess best practices for promoting use of research-based evidence in policy and decision-making processes.

COURSE PRE-REQUISITES

There are no prerequisites for this graduate course. This elective course is open to all graduate students in the Faculty of Management and related programs.

LEARNING OUTCOMES

Upon completion of the course, students are expected to have gained basic knowledge or proficiency in the following areas:

1. The types of research-based information created for and/or used in policy and decision-making;
2. The contexts (e.g., governmental and intergovernmental) in which research may be used in policy and decision making and a variety of perspectives about evidence-based policy and decision-making;
3. The role(s) of research-based information in policy and decision-making contexts;
4. The challenges (enablers and barriers) in facilitating use of research-based information in policy and decision-making;
5. The complexity of measuring use and influence of information; and
6. Application of best practices in promoting wider awareness and use of research-based information in policy and decision-making.

TECHNOLOGY REQUIREMENTS
A Brightspace course site will serve as the main resource site for this course where copies of all course materials will be posted, discussion boards will be available, and related materials will be posted. The course will be conducted via in-person classes.

INSTRUCTIONAL METHODS
Instruction in this course will include lectures, cases, and class discussion. Throughout the course, guest speakers will be featured to offer expert insights on various aspects of the complex research-policy interface phenomenon. Members of the Environmental Information: Use and Influence research team will contribute to the course (www.eiui.ca). Students will prepare for, and engage in discussion of, concepts and ideas presented in class through readings and cases.

LEARNING MATERIALS
A specific text has not been assigned in this course. Nonetheless, selections from the following books will be included in the weekly readings and students may wish to consult the full volumes as resources for the course themes and assignments.

Boaz, A., Davies, H., Fraser, A., & Nutley, S. (Eds.) (2019). *What works now? Evidence- informed policy and practice*. Bristol: The Policy Press. ISBN 978-1-4473-4548-0 (paperback).

Bogenschneider, K., & Corbett, T. (2021). *Evidence-based policymaking: Envisioning a new era of theory, research, and practice* (2nd edition). New York: Routledge. ISBN 978-0-367- 52385-5 (paperback).

Dillon, S., & Craig, C. (2021). *Storylistening: Narrative evidence and public reasoning*. New York: Routledge. ISBN 978-0-367-40673-8 (paperback).

While this book has been included in the line-up of texts, a video discussion between the two authors has been included in the Readings for Week 5, rather than sections of the book. As a Humanities perspective is often absent in treatments of the use of evidence in decision-making, this insightful book is a welcome addition to the literature on the broad themes of this course.

Students with undergraduate and graduate degrees in the Humanities may find the book interesting and may wish to read the book or selected chapters after viewing the video.

METHODS OF EVALUATION

Students will be evaluated in this course as noted below. Detailed instructions regarding each assignment will be provided. Assessment of all assignments is directly related to attention to the instructions, clarity of expression and presentation, and evidence of significant analysis and reflection. See also the Grading Policy of the Department of Information Science.

COMPONENT	DETAILS	DUE DATE	WEIGHT
Paper #1 - Seminar	Students will be assigned to a group, who will prepare and then lead the discussion for one of the weekly themes of the course. Further guidelines are provided separately.	Varies (beginning Week 4)	15%
Paper #2 – Review of a Policy Document	Students will select a policy document (from an assigned list) and provide a five-page assessment of the policy noting particularly how research-based information informed the preparation of the document. Further details are provided separately.	Tuesday, January 30 2024	15%
Paper #3 – Briefing memo of letter to the news media	Students will prepare either a two-page briefing memo for a policy context or a letter to the news media (a newspaper or other media). The objective of either submission will be to explain a research subject and issue at a level that non-experts can understand. Further guidelines will be provided separately.	Tuesday, March 12 2024	20%
Paper #4 - Essay	Students will write a 4,500-word essay on a topic selected in consultation with the instructor. Further guidelines will be provided separately.	Tuesday, April 16 2024	35%
Participation	This course involves considerable reading and consideration of topics about information and evidence as they relate to research-based (research-informed) policy and decision- making. Students are encouraged and expected to actively participate in the discussion of each of the themes of the course, during the classes. In addition, discussion boards are set up for each weekly theme. In general, students' participation will be assessed on the	n/a	15%

	following criteria: class attendance, completion of assigned readings, extent of participation in discussions, and adherence to course deadlines. *Attendance at the classes alone is not sufficient for satisfactory participation in this course.*		

PARTICIPATION EVALUATION RUBRIC

CRITERIA	WEIGHTING	INDICATORS
Preparation	40%	The student demonstrates consistent preparation for class; readings are always completed and the student is able to relate readings to each other and to other course material (discussions, presentations, guest speakers, etc.)
Quality of contributions	40%	The student's comments are relevant and reflect understanding of readings and other course material. The student's contributions move the discussion forward.
Frequency of participation	10%	The student is actively engaged in the class and/or discussions at all times.
Attendance/Punctuality	10%	The student is always punctual and no unexcused absences.

GRADING POLICY

A+	90-100	Demonstrates original work of distinction.
A	85-89	Demonstrates high-level command of the subject matter and an ability for critical analysis.
A-	80-84	Demonstrates above-average command of the subject matter.
B+	77-79	Demonstrates average command of the subject matter.
B	73-76	Demonstrates acceptable command of the subject matter.
B-	70-72	Demonstrates minimally acceptable command of the subject matter.
F	<70	Unacceptable for credit towards a Master's degree.

INTEGRATION OF MI Competencies

PROGRAM COMPETENCY	COURSE LEARNING OUTCOME	COURSE ASSESSMENT
Adaptation	Outcomes #1, 2, 3, 4, 5 & 6	Assignments # 1, 3, 4 & participation (depending on topics selected)
Collaboration	Outcomes #1, 2, 3, & 4	Assignments # 1, 2, 3, 4 & participation (depending on topics selected)
Commitment to equity, diversity, inclusion, accessibility, and decolonization	Outcomes #1, 2, 3, 4, 5 & 6	Assignments # 1, 2, 3, 4 & participation
Communication	Outcomes #1, 2, 3, & 4	Assignments # 1, 2, 3, 4 & participation
Digital and technological literacy	Outcomes #1, 2, 3, 4, 5 & 6	Assignments # 1, 2, 3, 4 & participation
Evidence-based practices	Outcomes #1, 2, 3, 4, 5 & 6	Assignments # 1, 2, 3, 4 & participation
Leadership	Outcomes # 2, 3, 4 & 6	Assignments # 1, 2 & 4 (depending on topics selected)
Learning	Outcomes #1, 2, 3, 4, 5 & 6	Assignments # 1, 2, 3 & 4 (depending on topics selected)
Management	Outcomes #2, 3, 4, 5 & 6	Assignments # 1, 2, 3 & 4 (depending on topics selected)
User-centred design	Outcomes #1, 2, 3, 4 & 6	Assignments # 1, 2, 3 & 4 (depending on topics selected)

CLASS POLICIES

Attendance
Class attendance is required in all MI courses and is included in the participation mark. Attendance records will be kept by the instructor. Student is expected to contact the instructor by email if they cannot attend class, must arrive late, or leave early.

Citation Style
MI courses use APA as the default standard citation style. Unless the instructor provides alternative written instructions, please use the APA citation style in your assignments to briefly identify (cite) other people's ideas and information and to indicate the sources of these citations in the References list at the end of the assignment. For more information on APA style, consult Dalhousie Library website at https://libraries.dal.ca/help/style-guides.html or the APA's Frequently Asked Questions about APA

Late penalties for assignments
A penalty for late assignments will be assessed, unless prior permission has been given by the instructor to submit an assignment late, which normally will be for extended illness, medical, or family emergencies only (see below). Late submissions will be assessed a penalty of five percent per day, including weekends. Assignments will not normally be accepted seven days or more after the due date; in such cases the student will receive a grade of zero.

Missed or Late Academic Requirements due to Student Absence:
Dalhousie University recognizes that students may experience short-term physical or mental health conditions, or other extenuating circumstances that may affect their ability to attend required classes, tests, exams or submit other coursework.

Dalhousie students are asked to take responsibility for their own short-term absences (3 days or less) by contacting their instructor by phone or email prior to the academic requirement deadline or scheduled time **AND** by submitting a completed Student Declaration of Absence form to their instructor in case of missed or late academic requirements. Only 2 separate Student Declaration of Absence forms may be submitted per course during a term.

ACCOMMODATION POLICY FOR STUDENTS

The Student Accessibility Centre is Dalhousie's centre of expertise for student accessibility and accommodation. The advising team works with students on the Halifax campus who request accommodation as a result of: a disability, religious obligation, or any barrier related to any other characteristic protected under Human Rights legislation (NS, NB, PEI, NFLD).

If there are aspects of the design, instruction, and/or experiences within this course that result in barriers to your inclusion please contact the Student Accessibility Centre. Please visit www.dal.ca/access for more information and to obtain the Request for Accommodation form.

A note taker may be required as part of a student's accommodation. Visit https://www.dal.ca/campus_life/academic-support/accessibility/accommodations-/classroom-accommodation.html for more details. Please note that your classroom may contain accessible furniture and equipment. It is important that these items remain in the classroom, undisturbed, so that students who require their use will be able to fully participate.

ACADEMIC INTEGRITY

At Dalhousie University, we are guided in all of our work by the values of academic integrity: honesty, trust, fairness, responsibility and respect. As a student, you are required to demonstrate these values in all of the work you do. The University provides policies and procedures that every member of the university community is required to follow to ensure academic integrity.

The commitment of the Faculty of Management is to graduate future leaders of business, government and civil society who manage with integrity and get things done. This is non-negotiable in our community and it starts with your first class at Dalhousie University. So when you submit any work for evaluation in this course or any other, please ensure that you are familiar with your obligations under the Faculty of Management's Academic Integrity Policies and that you understand where to go for help and advice in living up to our standards. You should be familiar with the Faculty of Management Professor and Student Contract on Academic Integrity, and it is your responsibility to ask questions if there is anything you do not understand.

Dalhousie offers many ways to learn about academic writing and presentations so that all members of the University community may acknowledge the intellectual property of others. Knowing how to find, evaluate, select, synthesize and cite information for use in assignments is called being "information literate." Information literacy is taught by Dalhousie University Librarians in classes and through Dalhousie Libraries' online Citing & Writing tutorials.

Do not plagiarize any materials for this course. For further guidance on what constitutes plagiarism, how to avoid it, and proper methods for attributing sources, please consult the University Secretariat's Academic Integrity page.

Please note that Dalhousie subscribes to plagiarism detection software that checks for originality in submitted papers. Any paper submitted by a student at Dalhousie University may be checked for originality to confirm that the student has not plagiarized from other sources. Plagiarism is considered a very serious academic offence that may lead to loss of credit, suspension or expulsion from the University, or even the revocation of a degree. It is essential that there be correct attribution of authorities from which facts and opinions have been derived. At Dalhousie, there are University Regulations which deal with plagiarism and, prior to submitting any paper in a course; students should read the Policy on Academic Dishonesty contained in the Calendar.

Furthermore, the University's Senate has affirmed the right of any instructor to require that student assignments be submitted in both written and computer readable format, e.g.: a text file or as an email attachment, and to submit any paper to a check such as that performed by the plagiarism detection software. As a student in this class, you are to keep an electronic copy of any paper you submit, and the course instructor may require you to submit that electronic copy on demand. Use of third-party originality checking software does not preclude instructor

use of alternate means to identify lapses in originality and attribution. The result of such assessment may be used as evidence in any disciplinary action taken by the Senate.

Finally:
If you suspect cheating by colleagues or lapses in standards by a professor, you may use the confidential email: ManagementIntegrity@dal.ca which is read only by the Assistant Academic Integrity Officer.

Faculty of Management clarification on plagiarism versus collaboration:

There are many forms of plagiarism, for instance, copying on exams and assignments. There is a clear line between group work on assignments when explicitly authorised by the professor and copying solutions from others. It is permissible to work on assignments with your friends but only when the professor gives you permission in the specific context of the assignment. University rules clearly stipulate that all assignments should be undertaken individually unless specifically authorised.

Specific examples of plagiarism include, but are not limited to, the following:
- Copying a computer file from another student, and using it as a template for your own solution
- Copying text written by another student
- Submitting the work of someone else, including that of a tutor as your own

An example of acceptable collaboration includes the following:
- When authorised by the professor, discussing the issues and underlying factors of a case with fellow students, and then each of the students writing up their submissions individually, from start to finish.

UNIVERSITY STATEMENTS
This course is governed by the academic rules and regulations set forth in the University Calendar and the Senate.

ACCESSIBILITY
The Student Accessibility Centre is Dalhousie's centre of expertise for matters related to student accessibility and accommodation. We work collaboratively with Dalhousie and King's students, faculty, and staff to create an inclusive educational environment for students. The Centre is responsible for administering the university-wide Student Accommodation Policy working across all programs and faculties.

STUDENT CODE OF CONDUCT
Everyone at Dalhousie is expected to treat others with dignity and respect. The Code of Student Conduct allows Dalhousie to take disciplinary action if students don't follow this community

expectation. When appropriate, violations of the code can be resolved in a reasonable and informal manner—perhaps through a restorative justice process. If an informal resolution can't be reached, or would be inappropriate, procedures exist for formal dispute resolution.

DIVERSITY AND INCLUSION

Every person at Dalhousie has a right to be respected and safe. We believe inclusiveness is fundamental to education. We stand for equality. Dalhousie is strengthened in our diversity. We are a respectful and inclusive community. We are committed to being a place where everyone feels welcome and supported, which is why our Strategic Direction prioritizes fostering a culture of diversity and inclusiveness (Strategic Priority 5.2).

INTERNATIONALIZATION

At Dalhousie, "thinking and acting globally" enhances the quality and impact of education, supporting learning that is "interdisciplinary, cross-cultural, global in reach, and orientated toward solving problems that extend across national borders."

RECOGNITION OF MI'KMAQ TERRITORY

Dalhousie University is located in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq. We are all Treaty people. For more information about the purpose of territorial acknowledgements, or information about alternative territorial acknowledgements if your class is offered outside of Nova Scotia, please visit https://native-land.ca/.

The Elders in Residence program provides students with access to First Nations elders for guidance, counsel and support. Visit the office in the McCain Building (room 3037) or contact the programs at elders@dal.ca or 902-494-6803 (leave a message).

FAIR DEALING POLICY

The Dalhousie University Fair Dealing Policy provides guidance for the limited use of copyright protected material without the risk of infringement and without having to seek the permission of copyright owners. It is intended to provide a balance between the rights of creators and the rights of users at Dalhousie.

COURSE SCHEDULE

Copies of readings may be accessed as follows:
1) copies of some readings are posted in the course Brightspace site. For example, some book chapters or reports, not readily accessible in the open web, are posted in the course site;
2) journal articles are available online. Many readings are found in journals available via the extensive licences arranged by the Dalhousie University Libraries at http://libraries.dal.ca [search for the title of the journal in "e-journals" at the search interface on the Libraries' main page, and then proceed to select the designated paper], and
3) some readings are available at designated websites, e.g., blog posts and audio / video recorded interviews.

Several guest speakers will participate in the course throughout the term to present insights about the weekly themes noted below. These speakers are knowledgeable about the overall subject of the course and will address specific themes based on their research and experience. The schedule of the speakers' participation may be updated as the course progresses.

Week 1—9 January 2024—Introduction to the Course

Topics
What is the purpose of this course? What characterizes contemporary contexts for policy and decision making?

Readings
Boaz, A., Davies, H., Fraser, A., & Nutley. S. (2019). What works now? An introduction. In A. Boaz, H. Davies, A. Fraser, & S. Nutley (Eds.). *What works now? Evidence-informed policy and practice* (Chapter 1, pp. 1-15). Bristol: The Policy Press.

Bogenschneider, K., & Corbett, T. J. (2021). Why there is a disconnect between research and policy and what we can do. In K. Bogenschneider & T. J. Corbett. *Evidence-based policymaking: Envisioning a new era of theory, research, and practice* (2nd ed., Chapter 1, pp. 3-23). New York: Routledge.

View the video (17:55) featuring **Sir Peter Gluckman**, President of the International Science Council and former Chief Science Advisor to the New Zealand Prime Minister, in conversation with **Jean-Claude Burgelman**, Professor of Open Science Policy at the Free University of Brussels (VUB) and former Head of Unit for Open Science Policy at the European Commission. In reflecting on the early months of the COVID-19 pandemic, Gluckman identified several themes that continue to be relevant and will be considered as the course proceeds.

Sir Peter Gluckman. Part I – Science Advice and Policymaking. (2020, November 25). YouTube. https://www.youtube.com/watch?v=KpuRofFWEHQ

Week 2—16 January 2024 —Decision Making & Policy Development. Evidence-Based Policy: History and Current Day

Topics
What is evidence-based policy and how has it been applied in national and international contexts?

Guest: Dr. Kevin Quigley, Academic Director, MacEachen Institute for Public Policy & Governance, Dalhousie University

Readings

Bogenschneider, K., & Corbett, T. J. (2021). Understanding the policy process: Insights from insiders. In K. Bogenschneider & T. J. Corbett. *Evidence-based policymaking: Envisioning a new era of theory, research, and practice* (2nd ed., Chapter 4, pp. 60-89). New York: Routledge.

Cairney, P. (2019). Evidence and policy making. In A. Boaz, H. Davies, A. Fraser, & S. Nutley (Eds.). *What works now? Evidence-informed policy and practice* (Chapter 2, pp. 21-40). Bristol: The Policy Press.

Craft, J., & Henderson, S. (2023). Policy staff and the evolving nature of policy analytical capacity in Australia, Britain, Canada, and New Zealand. *Policy Studies*, 1–25. https://doi.org/10.1080/01442872.2023.2233452

Turnbull, L. (2020). The House of Commons and responsible government. In J. Bickerton & A- G. Gagnon (Eds.). *Canadian politics* (7th ed., Chapter 4, pp. 65-79). Toronto: University of Toronto Press.

Week 3—23 January 2024 —Information Production for Development of Public Policy - Part 1: Scientific Information / Social Science Information

Topics
What characterizes scientific and social science information? How is scientific and social science information published and what characteristics (e.g., format) factor in its use in policy and decision making?

Guest: Dr. Peter Wells, Marine Scientist, International Ocean Institute – Canada, formerly with Environment Canada

Readings
Bennett, N. J., Dodge, M., Akre, T. S., Canty, S. W. J., Chiaravalloti, R., Dayer, A. A., Deichmann, J. L., Gill, D., McField, M., McNamara, J., Murphy, S. E., Nowakowski, A. J., & Songer, M. (2022). Social science for conservation in working landscapes and seascapes. *Frontiers in Conservation Science*, *3*, 954930. https://doi.org/10.3389/fcosc.2022.954930

Brady, J., Kehoe, K., & Wright, J. M. (2021). *Why "people focused research matters": A Briefing Note on Social Sciences and Humanities Research and Ocean Management in the Atlantic Region*. 2 p. [Halifax: Royal Society of Canada – Atlantic].

Editors. (2019, February 21). Embrace all sizes. *Nature, 566*, 295. https://doi.org/10.1038/d41586-019-00558-3

Elliott, J., Lawrence, R., Minx, J. C., Oladapo, O. T., Ravaud, P., Tendal Jeppesen, B., Thomas, J., Turner, T., Vandvik, P. O., & Grimshaw, J. M. (2021). Decision makers need "living" evidence synthesis. *Nature*, *600*(7889), 383-385. https://doi.org/10.1038/d41586-021- 03690-1

Partelow, S., Schlüter, A., Ban, N. C., Batterbury, S., Bavinck, M., Bennett, N. J., Bleischwitz, R., Blythe, J., Bogusz, T., Breckwoldt, A., Cinner, J. E., Glaser, M., Govan, H., Gruby, R., Hatje, V., Hornidge, A.-K., Hovelsrud, G. K., Kittinger, J. N., Kluger, L. C., … Villasante, S. (2023). Five social science intervention areas for ocean sustainability initiatives. *Npj Ocean Sustainability*, *2*(1), 24. https://doi.org/10.1038/s44183-023-00032-8

McMahan, P. (2021, June 22). Review papers and the creative destruction of the research literature. *LSE Impact Blog*. https://blogs.lse.ac.uk/impactofsocialsciences/2021/06/22/review-papers-and-the-creative- destruction-of-the-research-literature/

Olson, J., & Pinto da Silva, P. (2020). Knowledge production at the science-policy interface: Lessons from fisheries scientists. *Science and Public Policy, 47*(1), 47-55. https://doi.org/10.1093/scipol/scz045

Week 4—30 January 2024—Communication of Research Information: Enablers and Barriers

Topics
What factors enable or prevent the communication of research-based information in public policy contexts?

Guest: Dr. Janice Graham, University Research Professor, Division of infectious Diseases, and Department of Sociology and Social Anthropology, Dalhousie University

Readings
Listen to the interview or read the transcript: CleanLaw 53: Joe Goffman speaks with Katharine Hayhoe about climate change attribution and communicating the reality of climate change to the public, December 15, 2020.
Podcast available at: https://eelp.law.harvard.edu/2020/12/cleanlaw-katharine-hayhoe- and-joe-goffman-talk-climate-science-communication-and-hope/
Transcript available at: http://eelp.law.harvard.edu/wp-content/uploads/CleanLaw-53.pdf

Burrows, S., Olive, R., O'Brien, S., & Galloway, T. (2022). Connection is key when there's no planet B: The need to innovate environmental science communication with transdisciplinary approaches. *Science of The Total Environment*, *853*, 158435.https://doi.org/10.1016/j.scitotenv.2022.158435

Connors, S. L., Nicolai, M., Berger, S., Pidcock, R., Walsh, M., & Hawtin, N. (2022). Co-developing the IPCC frequently asked questions as an effective science communication tool. *Climatic Change*, *171*(1–2), 10. https://doi.org/10.1007/s10584-021-03248-0

Hajdu, M., & Simoneau, C. (2020). Communicating science in a policy context to a broader audience. In V. Šucha & M. Sienkiewicz (Eds.), *Science for policy handbook* (Chapter 15, pp. 166–179). Elsevier. https://doi.org/10.1016/B978-0-12-822596-7.00015-2

Jones, J., Keller, C. P., & van der Flier Keller, E. (2022). Insights into ENGO activities in the Salish Sea: A call for more coordination, communication, and potential for communities of practice. *Environmental Science & Policy*, *133*, 127–136. https://doi.org/10.1016/j.envsci.2022.03.017

Martel-Morin, M., & Lachapelle, E. (2022). The Five Canadas of climate change: Using audience segmentation to inform communication on climate policy. *PLOS ONE*, *17*(11), e0273977. https://doi.org/10.1371/journal.pone.0273977

Thorp, H. H. (2022). Communicating with clarity. *Science*, *377*(6613), 1363. https://doi.org/10.1126/science.ade8683

Week 5—6 February 2024—Information Production for Development of Public Policy - Part 2: Indigenous and Local Knowledge / Health Information / Humanities Information

Topics

How do local knowledge, Indigenous knowledge, and other experiences factor into policy and decision making? In addition, how is health and humanities information published and what characteristics (e.g., format) factor in its use in policy and decision making?

Guest: Dr. Shelley Denny, Director of Aquatic Research and Stewardship, Unama'ki Institute of Natural Resources

Readings

INGSA Horizon Series. (2021, September 26). Clair Craig and Sarah Dillon – Narrative evidence and critical listening. [YouTube; 46:11].
https://www.youtube.com/watch?v=LIqImTV5Bsw&t=12s

Cadman, R., Snook, J., Gilbride, J., Goudie, J., Watts, K., Dale, A., Zurba, M., & Bailey, M. (2023). Labrador Inuit resilience and resurgence: Embedding Indigenous values in commercial fisheries governance. *Ecology and Society*, *28*(2), art11. https://doi.org/10.5751/ES-14110-280211

Deroover, K., Knight, S., Burke, P. F., & Bucher, T. (2023). Why do experts disagree? The development of a taxonomy. *Public Understanding of Science*, *32*(2), 224–246.
https://doi.org/10.1177/09636625221110

Jessani, N. S., Ling, B., Babcock, C., Valmeekanathan, A., & Holtgrave, D. R. (2022). Advocacy, activism, and lobbying: How variations in interpretation affects ability for academia to engage with public policy. *PLOS Global Public Health*, *2*(3), e0000034.
https://doi.org/10.1371/journal.pgph.0000034

Latulippe, N., & Klenk, N. (2020). Making room and moving over: Knowledge co-production, Indigenous knowledge sovereignty and the politics of global environmental change decision-making. *Current Opinion in Environmental Sustainability*, *42*, 7–14.
https://doi.org/10.1016/j.cosust.2019.10.010

Wilson P. & Sheldon, T. (2019). Using evidence in health and healthcare. In A. Boaz, H. Davies, A. Fraser, & S. Nutley (Eds.). *What works now? Evidence-informed policy and practice* (Chapter 4, pp. 67-87). Bristol: The Policy Press.

Tran, M., & Salamanca, A. (2023). *Advancing climate policy: Harnessing Indigenous knowledge at the science-policy interface* (pp. 12, [1]). Stockholm Environment Institute.
https://doi.org/10.51414/sei2023.029

Week 6— 13 February 2024 —What is Evidence?

Topics
What constitutes evidence? How is evidence defined by creators and users? What are the pathways of research-based information in policy and decision-making contexts?

Guest: Dr. Suzuette Soomai, Canada Department of Fisheries and Oceans; Adjunct Faculty Member, School of Information Management, Dalhousie University

Readings
Bozeman, B. (2022). Use of science in public policy: Lessons from the COVID-19 pandemic efforts to "Follow the Science." *Science and Public Policy*, scac026. https://doi.org/10.1093/scipol/scac026

Editors. (2022, November 17). Agriculture sorely needs a system for evidence synthesis. *Nature*, *611*(7936), 425–426. https://doi.org/10.1038/d41586-022-03694-5

Flemming, K., & Noyes, J. (2021). Qualitative evidence synthesis: Where are we at? *International Journal of Qualitative Methods*, *20*, 160940692199327. https://doi.org/10.1177/1609406921993276

Geddes, M. (2023). *Good evidence. How do select committees use evidence to support their work? Findings from a Parliamentary Academic Fellowship Scheme project* (p. 43). University of Edinburgh. https://www.sps.ed.ac.uk/sites/default/files/assets/pdf/GoodEvidence-MarcGeddes-Jan2023.pdf

MacKillop, E., & Downe, J. (2023, January 10). Researchers engaging with policy should take into account policymakers' varied perceptions of evidence. *LSE Impact Blog*. https://blogs.lse.ac.uk/impactofsocialsciences/2023/01/10/researchers-engaging-with-policy-should-take-into-account-policymakers-varied-perceptions-of-evidence/

Nutley, S. M., Davies, H. T. O., & Hughes, J. (2019). Assessing and labelling evidence. In A. Boaz, H. T. O. Davies, A. Fraser, & S. M. Nutley (Eds.), *What works now? Evidence-informed policy and practice* (Chapter 11, pp. 225-249). Bristol: The Policy Press.

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~Winter Term Study Break – 19-23 February 2024~

Week 7 —27 February 2024 —The Science-Policy Interface

Topics
As an example of research-policy interfaces, what characterizes the science-policy interface?

Guest: Vanessa Sung, Senior Research Associate, Evidence for Democracy, Ottawa

Readings

MacDonald, B. H., Soomai, S. S., De Santo, E. M., & Wells, P. G. (2016). Understanding the science-policy interface in integrated coastal and ocean management. In B. H. MacDonald, S. S. Soomai, E. M. De Santo, & P. G. Wells (Eds.). *Science, information, and policy interface for effective coastal and ocean management* (Chapter 2, pp. 19-43). Boca Raton, FL: CRC Press. [Open access link]

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Qaiser, F., Fowler, C., & Achor, V. (2022). *Eyes on evidence III: An assessment of the transparency of evidence usage across provincial policy announcements* (p. 41). Evidence for Democracy. https://evidencefordemocracy.ca/sites/default/files/reports/eyes_on_evidence_iii_report.pdf

Tellmann, S. M., & Gulbrandsen, M. (2022). The other side of the boundary: Productive interactions seen from the policy side. *Science and Public Policy*, scac013. https://doi.org/10.1093/scipol/scac013

van den Hove, S. (2007). A rationale for science-policy interfaces. *Futures, 38*, 807-826. https://doi.org/10.1016/j.futures.2006.12.004

Wang, M., Green, C., & Wang, Z. (2022). Six recommendations for early career professionals to join work at the science–policy interface: Collective experience from academic, governmental, and NGO scientists. *Environmental Science & Technology*, acs.est.2c08290. https://doi.org/10.1021/acs.est.2c08290

Wellstead, A. M., Schmidt, K., & Gofen, A. (2023). The science–policy interface and evidence-based policymaking in environmental policy. In H. Jörgens, C. Knill, & Y. Steinebach (Eds.), Routledge Handbook of Environmental Policy (pp. 207–220). Routledge. https://doi.org/10.4324/9781003043843-17

Week 7— 27 February 2024—Role of News Media / Social Media

Topics
What is the role of the news media and contemporary social media in promoting awareness and use of research-based information? What happens when the information is "fake"?

Guest: Daniel Cressey, Deputy Editor, *Research Fortnight*, and formerly, senior science journalist, *Nature*, London

Readings
Beall, J. M., Pharr, L. D., von Furstenberg, R., Barber, A., Casola, W. R., Vaughn, A., Peterson, M. N., & Larson, L. R. (2022). The influence of YouTube videos on human tolerance of sharks. *Animal Conservation*, acv.12808. https://doi.org/10.1111/acv.12808

Brainard, J. (2022). Riding the Twitter wave. Enthusiasm for the social media platform changed science communication during the pandemic-but will it last? *Science*, *375*(6587), 1345–1347. https://doi.org/10.1126/science.abq1756

Brossard, D., & Scheufele, D. A. (2022). The chronic growing pains of communicating science online. *Science*, *375*(6581), 613–614. https://doi.org/10.1126/science.abo0668

Chen, K., Molder, A. L., Duan, Z., Boulianne, S., Eckart, C., Mallari, P., & Yang, D. (2022). How climate movement actors and news media frame climate change and strike: Evidence from analyzing twitter and news media discourse from 2018 to 2021. *The International Journal of Press/Politics*, 194016122211064. https://doi.org/10.1177/19401612221106405

Condie, C. M., Vince, J., & Alexander, K. A. (2022). The long-term evolution of news media in defining socio-ecological conflict: A case study of expanding aquaculture. *Marine Policy*, *138*, 104988. https://doi.org/10.1016/j.marpol.2022.104988

Lester, L., & Foxwell-Norton, K. (2020). Citizens and science: Media, communication and conservation. In W. J. Sutherland, P. N. M. Brotherton, Z. G. Davies, N. Ockendon, N. Pettorelli, & J. A. Vickery (Eds.), *Conservation Research, Policy and Practice* (Chapter 16, pp. 265-276). Cambridge University Press. https://doi.org/10.1017/9781108638210.016

Slater, M. H., Scholfield, E. R., & Moore, J. C. (2021). Reporting on science as an ongoing process (or not). *Frontiers in Communication*, *5*, 535474. https://doi.org/10.3389/fcomm.2020.535474

Week 9—12 March 2024—Improving Use of Research-Based Information in Policy Contexts

Topics

Based on the earlier themes of the course, what actions could be taken to improve the use of research-based information in policy contexts? What recommendations can be made for best practices regarding increased awareness and use of research-based information?

Guest: Professor William Lahey, President of the University of King's College, and Professor of Law, Dalhousie University

Readings

Listen to the Science for Policy Podcast, 5 December 2022 featuring Sir Geoff Mulgan on "How to synthesize knowledge." SAPEA Communications. [YouTube, 41:43].
https://www.youtube.com/watch?v=8FCVPj-3D24

Bogenschneider, K., & Corbett, T. J. (2021). Engaging policymakers: Best practices from those who study it and do it! In K. Bogenschneider & T. J. Corbett. *Evidence-based policymaking: Envisioning a new era of theory, research, and practice* (2nd ed., Chapter 10, pp. 254-292). New York: Routledge.

Bundi, P., & Pattyn, V. (2022). Trust, but verify? Understanding citizen attitudes toward evidence-informed policy making. *Public Administration*, padm.12852.
https://doi.org/10.1111/padm.12852

Karcher, D. B., Cvitanovic, C., van Putten, I. E., Colvin, R. M., Armitage, D., Aswani, S., Ballesteros, M., Ban, N. C., Barragán-Paladines, M. J., Bednarek, A., Bell, J. D., Brooks, C. M., Daw, T. M., de la Cruz-Modino, R., Francis, T. B., Fulton, E. A., Hobday, A. J., Holcer, D., Hudson, C., ... Zhang, J. (2022). Lessons from bright-spots for advancing knowledge exchange at the interface of marine science and policy. *Journal of Environmental Management*, *314*, 114994.
https://doi.org/10.1016/j.jenvman.2022.114994

MacKillop, E., Quarmby, S., & Downe, J. (2020). Does knowledge brokering facilitate evidence-based policy? A review of existing knowledge and an agenda for future research. *Policy & Politics, 48*(2), 335-353. https://doi.org/10.1332/030557319X15740848311069

Pugel, J., Long, E. C., Fernandes, M. A., Cruz, K., Giray, C., Crowley, D. M., & Scott, J. T. (2022). Who is listening? Profiles of policymaker engagement with scientific communication. *Policy & Internet*, *14*(1), 186-201. https://doi.org/10.1002/poi3.273

Week 10—19 March 2024 —Role of Public Consultations / Advisory Processes

Topics

What is the role of public consultations and other advisory processes in policy and decision making at various governance levels (local to international)? How does research-based information factor in these activities?

Guest: Dr. Anya Waite, Associate Vice-President Research (Ocean), Dalhousie University, and Scientific Director and CEO of the Ocean Frontier Institute

Readings

Ballesteros, M., & Dickey-Collas, M. (2023). Managing participation across boundaries: A typology for stakeholder engagement in the International Council for the Exploration of the Sea. *Marine Policy*, *147*, 105389. https://doi.org/10.1016/j.marpol.2022.105389

Chwalisz, C. (2021). The pandemic has pushed citizen panels online. *Nature*, *589*(7841), 171. https://doi.org/10.1038/d41586-021-00046-7

Doberstein, C. (2022). How public servants confront common dilemmas in public engagement: Evidence from a survey of Canadian public officials. *International Journal of Public Administration*, 1–11. https://doi.org/10.1080/01900692.2022.2085299

Editors. (2022). Global science must not be treated as a diplomatic pawn. *Nature*, *612*(7941), 589–590. https://doi.org/10.1038/d41586-022-04477-8

Fraussen, B., Albareda, A., & Braun, C. (2020). Conceptualizing consultation approaches: Identifying combinations of consultation tools and analyzing their implications for stakeholder diversity. *Policy Sciences, 53*(3), 473-493. https://doi.org/10.1007/s11077-020- 09382-3

Health Canada. (2000). *Health Canada policy toolkit for public involvement in decision making*. Ottawa: Health Policy and Communications Branch. https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/ahc-asc/alt_formats/pacrb- dgapcr/pdf/public-consult/2000decision-eng.pdf

Moreland, H. R., De Santo, E. M., & MacDonald, B. H. (2021). Understanding the role of information in marine policy development: Establishing a coastal marine protected area in Nova Scotia, Canada. *FACETS*, *6*, 1-30. https://doi.org/10.1139/facets-2020-0109

Week 11 —26 March 2024—Measuring the Use and Influence of Research-Based Information

Topics

What models describe the research-policy relationship? How can we assess research use in policy and decision making contexts?

Guest: Hon. Stanley Kutcher, MD, FRCPC, Senator (Nova Scotia), Senate of Canada

Readings

Arnott, J. C., & Lemos, M. C. (2021). Understanding knowledge use for sustainability. *Environmental Science & Policy*, *120*, 222-230. https://doi.org/10.1016/j.envsci.2021.02.016

Bogenschneider, K., Normandin, H., Onaga, E., Bowman, S., Wadsworth, S. M., & Settersten, R. A. (Jr.). (2021). Evaluating efforts to communicate research to policy makers: A theory of change in action. In K. Bogenschneider & T. J. Corbett. *Evidence-based policymaking: Envisioning a new era of theory, research, and practice* (2nd ed., Chapter 8, pp. 195-231). New York: Routledge.

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Englund, M., André, K., Gerger Swartling, Å., & Iao-Jörgensen, J. (2022). Four methodological guidelines to evaluate the research impact of co-produced climate services. *Frontiers in Climate*, *4*, 909422. https://doi.org/10.3389/fclim.2022.909422

Soomai, S. S., Wells, P. G., MacDonald, B. H., De Santo, E. M., & Gruzd, A. (2016). Measuring awareness, use, and influence of information: Where theory meets practice. In B. H. MacDonald, S. S. Soomai, E. M. De Santo, & P. G. Wells (Eds.), *Science, information, and policy interface for effective coastal and ocean management* (Chapter 11, pp. 253-279). CRC Press, Division of Taylor & Francis. [Open Access – Link]

Williams, K. (2022). What counts: Making sense of metrics of research value. *Science and Public Policy*, *49*(3), 518–531. https://doi.org/10.1093/scipol/scac004

Week 12— 2 April 2024—Course Wrap-Up: What Have We Learned?

Topics
What has this course taught us about the role of information and evidence in public policy and decision making?

Readings
Aronson, J. K., Barends, E., Boruch, R., Brennan, M., Chalmers, I., Chislett, J., Cunliffe-Jones, P., Dahlgren, A., Gaarder, M., Haines, A., Heneghan, C., Matthews, R., Maynard, B., Oxman, A. D., Oxman, M., Pullin, A., Randall, N., Roddam, H., Schoonees, A., … Vale, L. (2019). Key concepts for making informed choices. *Nature, 572*(7769), 303-306. https://doi.org/10.1038/d41586-019-02407-9

Davies, H., Boaz, A., Nutley, S., & Fraser, A. (2019). Conclusions: Lessons from the past, prospects for the future. In A. Boaz, H. Davies, A. Fraser, & S. Nutley (Eds.). *What works now? Evidence-informed policy and practice* (Chapter 18, pp. 369-382). Bristol: The Policy Press. Editors. (2022, March 3). Wanted: Better systems for turning evidence into action. *Nature*, *603*(7899), 7–8. https://doi.org/10.1038/d41586-022-00559-9