

INDS 502E–September-December 2016

Methodologies of Crossing: Exploring Interdisciplinary Knowledges, Trajectories, and Worldviews

Professor: Dr. Rajdeep S. Gill

Day/Time: Mondays, 1-4 pm

Location: MacMillan 256, University of British Columbia, Musqueam Territory

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Office hrs: Right after class and by appointment

Course Description

This course offers a creative and collaborative approach to understanding and exploring interdisciplinary constructions of knowledge across the humanities, social sciences and natural sciences. The methodological, structural and socio-ecological contours of diverse historical and contemporary formations of interdisciplinarity will be intricately examined. This course will strongly focus on the interrelationship of knowledge and value, interdisciplinarity and public reason.

This course will involve experiential learning and in-depth dialogue. Guest speakers from the UBC community and beyond will be invited to enrich interdisciplinary engagement and learning. This course will also provide a supportive and exploratory space for connecting interdisciplinarity to the specific research, methodological and personal interests of each course participant.

No background in interdisciplinary research is required, and students from any and all areas of study are welcome. Curiosity, adventurousness, imagination and creativity will be encouraged. The desire to expand avenues of knowledge exchange and translation across academic, community and public contexts will be welcomed and supported.

Course Learning Objectives

- ❖ To deepen curiosity and knowledge of interdisciplinary research and knowledge frameworks across the humanities, social sciences and natural sciences
- ❖ To explore multifaceted possibilities and pathways of translation and dialogue across knowledge, discipline, community and social borders
- ❖ To further understanding of knowledge construction in the context of experience and community, value and public reason
- ❖ To provide participants the opportunity to practically, theoretically, critically and creatively think through methodological issues in their research and the research of others
- ❖ To engage in participatory interdisciplinary learning and exchange

Evaluation Criteria and Assignments

<p>In-Class Participation</p> <p>Participation marks will be based on preparedness for class as demonstrated by careful reading of assigned materials, questions and comments shared in seminars, and ongoing engagement with class peers and guest speakers. Effort put into various in-class activities and exercises will also count towards participation evaluation.</p> <p>The participation grade evaluates consistency of attendance, effort, care in thought and engagement, and ability to sufficiently integrate course materials.</p>	20%
<p>Critical Responses</p> <p>Students will be expected to complete one page critical and creative responses to readings and class activities and discussions every other class.</p> <p>These short written responses will test student's capacity to succinctly, critically and creatively engage with a broad range of interdisciplinary methodologies, explorations and writing. Integrative and original thinking will be encouraged. Ability to contextualize and analyze in a well-reasoned manner will be evaluated.</p>	20%
<p>Individual Oral Presentation</p> <p>Each student will be expected to participate in one individual presentation on a set of weekly readings. The presentation will include summaries as well as critical and creative inquiry and engagement with selected course materials and thematics.</p> <p>The aim is to evaluate the ability of student</p>	10%

<p>participants to integrate and present on interdisciplinary research materials in a cohesive manner, to lead group discussion, and respond in class to queries made by their peers. Focus will be on the development of ideas, whether they are in the exploratory or in-depth stage.</p>	
<p>Collaborative Presentation</p> <p>This presentation will require collaboration in process, content and development. Groups will be assigned to encourage interdisciplinary learning and exchange with course participants from different fields and areas of interest. The presentation will involve active engagement with diverse methodologies and research, articulation of individual and group thinking, and explorations around a major course thematic. The aim of this assignment is to assist students in strengthening skills in co-operative, dialogic and collaborative knowledge-building as well as the ability to carefully hone meaning and cohesion across diverse yet thematically related fields of inquiry.</p>	<p>15%</p>
<p>Book or Dissertation Review</p> <p>Students will be expected to read and review an interdisciplinary book or dissertation. The dissertation may be selected from UBC theses available online. The book will have to be chosen from a list shared by the instructor or be an approved book of methodological interest and usefulness to the student. Students will be expected to assess the methodological strategies, insights, and implications of their chosen works along with providing a clear and incisive commentary on the work as a whole. This assignment (1200-1500 words) assesses the ability to discuss a large and complex research project in an illuminating and concise manner.</p>	<p>15%</p>

<p>Final Research/Methodology Paper</p> <p>The focus of the final paper (2,000-2,500 words) will be determined by the student in close consultation with the instructor. This assignment involves development of a sustained position or argument. This assignment will test methodological, research, analytical, integrative, and comparative abilities within an interdisciplinary context.</p>	<p>20%</p>
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<p>Peer Review</p> <p>Assessment of in-class participation, individual and group presentations will also involve peer review. Peer review may also be incorporated into other assignments.</p>

Assigned Readings and Reference Texts

The assigned material will include a wide range of articles and book chapters. Some readings may change based on observation of student engagement and class dialogue. There will be two main reference texts: Julie Thompson Klein, Carl Mitcham, and Robert Frodeman, *Oxford Handbook of Interdisciplinarity* (Oxford: Oxford University Press, 2012) and Allen F. Repko, *Interdisciplinary Research: Process and Theory*, 2nd ed. (Thousand Oaks: Sage Publishing, 2012). These books have been put on reserve at Koernor Library.

Weekly Topics and Readings

<p><u>Introductory Class – September 12</u></p> <p>Thematic:</p> <ul style="list-style-type: none"> ❖ Institutional and Social Contexts of Inter/disciplinarity ❖ Methodology, Knowledge Construction and Creativity ❖ Relationship between Form and Content of Knowledges <p><u>Screenings/Talks:</u></p> <ul style="list-style-type: none"> • Jeanette Armstrong on Knowledge of Place (Center for Ecoliteracy, 2009) • Craig Calhoun on Interdisciplinarity and Innovation (University of Southern California, Annenberg Series in Sustainable Innovation, 2009)

Class Two – September 19

Thematic:

- ❖ **Intersections of Epistemic Justice, Social Justice and Interdisciplinarity**
- ❖ **Cross-Sector, Collaborative Approaches to Knowledge**
- ❖ **Taxonomies of Interdisciplinarity**

Reading:

- John Robinson, "Being Undisciplined: Transgressions and Intersections in Academia and Beyond," *Futures* 40 (2008): 70-86.
- Jennifer Chan-Tiberghien, "Towards a 'Global Educational Justice' Research Paradigm: Cognitive Justice, Decolonizing Methodologies and Critical Pedagogy," *Globalisation, Societies and Education* 2:2 (2004): 191-213.
- Rauna Koukanen, "Introduction," *Reshaping the University: Responsibility, Indigenous Epistemes and the Logic of the Gift* (Vancouver: University of British Columbia Press, 2007): 1-21.
- Julie Thompson Klein, "A Taxonomy of Interdisciplinarity," in *Oxford Handbook of Interdisciplinarity* (Oxford: Oxford University Press, 2012) eds., Julie Thompson Klein, Carl Mitcham, and Robert Frodeman: 15-30.

Due: Student Mapping Exercise – map your research/creative process through collage, drawing, diagram, painting, poem or another medium

Class Three - FIRST CRITICAL RESPONSE DUE – September 26

Thematic:

- ❖ **Interdisciplinary Research: Examples, Process and Theory**
- ❖ **Sciences, Value and Integrative Thinking**
- ❖ **Constructs of Knowledge, Authority and Reason**

Reading/Listening:

- Bob Macdonald, "The Top 10 Unanswered Questions in the Universe," *Quirks and Quarks*, Radio Program, Jan. 2, 2010
<<http://www.cbc.ca/player/Radio/And+the+Winner+Is.../ID/2369580879>>
>
- Sandra Harding, "Is Science Multicultural?" *Configurations* 2.2 (1994): 301-330.

- Gregory Cajete, "Indigenous Knowledge and Western Science," Conference Talk, <<https://www.youtube.com/watch?v=nFeNI0glbw>>
- Allen F. Repko, *Interdisciplinary Research: Process and Theory* (Thousand Oaks: Sage, 2008): 22-24, 32-37, 126-133, 142, 280-292, 295-299, 310-311.
- Ursula Franklin, "The Sand Box and Tools," *The Ursula Franklin Reader: Pacifism as a Map* (Toronto: Between the Lines Press, 2006): 323-327.
- Bernadette Bensuade-Vincent and Jonathan Simon, "Taming the Nanoworld" and "Towards a Responsible Chemistry," *Chemistry: The Impure Science* (London: Imperial College Press, 2008): 215-226, 231-244.
- David Bohm and F. David Peat, "Revolutions, Theories, and Creativity in Science," *Science, Order and Creativity* (London: Routledge, 2000): 15-62.

Class Four – October 3

Thematic:

- ❖ **Notions of Humanism, Culture and Nature**
- ❖ **Interdisciplinary Contextualizations of Economy and Politics**
- ❖ **Interdisciplinarity & Socio-political and Socio-ecological Thought**

Reading:

- Jack Forbes, "Nature and Culture: Problematic Concepts for Native Americans" *Indigenous Traditions and Ecology: The Interbeing of Cosmology and Community*, ed., John A. Grim (Cambridge: Harvard University Press, 2000): 103-24.
- Edward Said, "Humanism's Sphere," *Humanism and Democratic Criticism* (Columbia: Columbia University Press, 2004): 1-31.
- Marc Bekoff and Jessica Pierce, *Wild Justice: The Moral Lives of Animals* (Chicago: University of Chicago Press, 2009): 1-54.
- Ronald Dworkin, "Baedeker," "Moral Responsibility," "Dignity," "From Dignity to Morality," *Justice for Hedgehogs* (Cambridge: Harvard University Press, 2011): 1-19, 99-122, 190-218, 255-270.
- John Borrows, "Introduction," *Freedom and Indigenous Constitutionalism* (Toronto: University of Toronto Press, 2016): 3-18.
- Jonathan Rowe, "Our Phony Economy," *Harper's Magazine*, June 2008: 17-24.
- Martha Nussbaum, "Preface," "A Woman Seeking Justice," and "Creating Capabilities," *Creating Capabilities: A Human Development Approach* (Cambridge: Harvard University Press, 2011): ix-xiv, 1-16, 17-45.

Class Five – SECOND CRITICAL RESPONSE DUE – October 17

Thematic:

- ❖ **Qualitative, Quantitative and Mixed Methods Research**
- ❖ **Interdisciplinarity and Cognitive Justice**
- ❖ **Technology and Epistemology**

Reading:

- Ursula Franklin, Selected Excerpts, *The Real World of Technology*, rev. ed. (Toronto: House of Anansi Press, 1999).
- Immanuel Wallerstein, "The Structures of Knowledge or How Many Ways May We Know," *Cognitive Justice in a Global World: Prudent Knowledges for a Decent Life*, ed. Boaventura De Sousa Santos (New York: Lexington Books, 2007): 129-34.
- Julie Thompson Klein, Excerpts, *Interdisciplining Digital Humanities: Boundary Work in an Emerging Field*. Ann Arbor: University of Michigan Press, 2015.
- Norman K. Denzin and Yvonna .S. Lincoln, Selected Excerpts, *Sage Handbook of Qualitative Research*, 4th ed. (Thousand Oaks: Sage, 2011).
- Gary K. Perry, "Exploring Occupational Stereotyping in the New Economy: The Intersection Tradition Meets Mixed Methods Research," in Michele Tracy Berger and Kathleen Guidroz, eds., *The Intersectional Approach: Transforming the Academy through Race, Class, and Gender* (Chapel Hill: University of North Carolina Press, 2010): 229-245.
- Walter, Maggie, and Andersen, Chris. "Indigenous Quantitative Methodological Practice-Canada," *Indigenous Statistics : A Quantitative Research Methodology* (Walnut Creek: Left Coast Press, 2013): 111-139.

Class Six – October 24

Thematic:

- ❖ **Democracy and Knowledge**
- ❖ **Interdisciplinarity & Public Reason**

Reading:

- John Beatty and Alfred Moore, "Should We Aim for Consensus?" *Episteme* 7 (2010): 198-214.
- John Burrows (Kegeдонce), "Part One: Minokmi; Issues: The First Hill," *Drawing Out Law: The Spirit's Guide* (Toronto: University of Toronto Press, 2010): 3-72.

- Audre Lorde, "The Transformation of Silence into Language and Action," "The Master's Tool Will Never Dismantle the Master's House," "Age, Race, Class, and Sex: Women Redefining Difference," *Sister Outsider: Essays and Speeches* (Berkeley: Crossing Press, 1984): 40-44, 110-113, 114-123.
- John Borrows, "First Nations and Human Rights," CBC IDEAS Radio Program, March 5, 2015, <http://www.cbc.ca/radio/ideas/fragile-freedoms-first-nations-and-human-rights-1.2913822>. Accessed August 1, 2015.
- Vanis Varoufakis, "Capitalism Will Eat Democracy - Unless We Speak Up," Ted Talk, December 2015, https://www.ted.com/talks/yanis_varoufakis_capitalism_will_eat_democracy_unless_we_speak_up?language=en#t-88411. Accessed September 11, 2016.
- Robert Frodeman, Excerpts, *Sustainable Knowledge: A Theory of Interdisciplinarity* (Basingstoke: Palgrave Macmillan, 2014).

Class Seven – COLLABORATIVE PROJECTS + THIRD CRITICAL RESPONSE DUE – October 31st

Student Presentations

Class Eight – November 7 – COLLABORATIVE PROJECTS cont.

Thematic:

- ❖ **Decolonization, Creativity and Interdisciplinarity**
- ❖ **Experience and Knowledge**
- ❖ **Emotions and Research**

Reading:

- Fabiola Nabil Naguib, "Decolonizing Inhabitations of Interdisciplinarity: Re/orienting 'Interdisciplinarity' within Connective Practice," in *Collision: Interarts Practice and Research*, eds. David Cecchetto, Nancy Cuthbert, Julie Lassonde, and Dylan Robinson (Newcastle Upon Tyne: Cambridge Scholars Press, 2008): 35-49.
- Audre Lorde, "Poetry is Not a Luxury," "Uses of the Erotic: The Erotic as Power," and "Uses of Anger: Women Responding to Racism," *Sister Outsider: Essays and Speeches* (Berkeley: Crossing Press, 1984): 36-39, 53-59, 124-133.
- Robert C. Solomon, Selected Excerpts, *A Passion for Justice: Emotions and the Origins of the Social Contract* (New York: Addison-Wesley Publishing Company, 1990).

- Martha C. Nussbaum, Selected Excerpts, *Upheavals of Thought: The Intelligence of Emotions* (New York: Cambridge University Press, 2001).

Class Nine- BOOK/DISSERTATION REVIEW DUE – November 14

Thematic:

- ❖ **Secularity and the Construction of Knowledge**
- ❖ **Interdisciplinarity & Spirituality**

Reading:

- Charles Taylor, Selected Excerpts, *A Secular Age* (Cambridge: Harvard University Press, 2007).
- Dipesh Chakrabarty, "Introduction: The Idea of Provincializing Europe," *Provincializing Europe: Postcolonial Thought and Historical Difference* (Princeton: Princeton University Press, 2000): 3-23.
- Talal Asad and Abdullahi An-Naim in Conversation, "Religion, Law, and the Politics of Human Rights," Berkeley Center for Religion, Peace, and World Affairs, Georgetown University. <<http://blogs.ssrc.org/tif/wp-content/uploads/2009/11/Talal-Asad-and-Abdullahi-An-Naim-in-conversation.pdf>>.
- Betty Bastien, Selected Excerpts, *The Worldview of the Siksikaitstapi: Blackfoot Ways of Knowing* (Calgary: University of Calgary Press, 2004).

Class Ten-OPTIONAL FOURTH CRITICAL RESPONSE DUE – November 21

Thematic:

- ❖ **Environmental and Cognitive Justice**
- ❖ **Role of the More-than-Human World in Enactments of Knowledge and Consciousness: Interdisciplinary Grounds and Implications**

Reading:

- Robin Wall Kimmerer, Excerpts, *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants* (Minneapolis: Milkweed Editions).
- Graham Harvey, "Animism's Challenges," *Animism: Respect the Living World* (New York: Columbia Press, 2006): 179-212.
- CBC Ideas Program, "Dancing In The Dark: The Intelligence of Bees," Thursday October 03, 2013, <http://www.cbc.ca/radio/ideas/dancing-in-the-dark-the->

[intelligence-of-bees-1.2913610](#)

- Matthew Hall, "Bridging the Gulf: Moving, Sensing, Intelligent Plants," *Plants as Persons: A Philosophical Botany* (Albany: State University of New York Press, 2011): 137-156.
- Alva Noë, Excerpts, *Out of Our Heads: Why You Are Not Your Brain, and Other Lessons from the Biology of Consciousness* (New York: Hill and Wang, 2010).
- David Abram, Interview by Scott London, <http://www.scottlondon.com/interviews/abram.html>. Accessed October, 2015.

Class Eleven- FINAL ESSAY DUE – November 28

Student-Focused Seminar

Student-led and student-focused discussion regarding Interdisciplinarity, Methodology, and Research

Class Twelve - December 5

Thematic:

❖ Bringing Interdisciplinary Explorations Home

Reflection-based sharing and summation in relation to each student's journeying during the course as well as instructor's sharing on course process, content, and discussions.

Some Additional Resources Pertaining to Discussions of Interdisciplinarity Knowledge

- Aldrich, John H. and collaborators. *Interdisciplinarity : Its Role in a Discipline-Based Academy*. New York: Oxford University Press, 2014.
- Barry, Andrew and Georgina Born, eds. *Interdisciplinarity : Reconfigurations of the Social and Natural Sciences*. Oxon: Routledge, 2013.
- Bartlett, Ronald. *Thinking and Rethinking the University: The Selected Works of Ronald Barnett*. Oxon: Routledge, 2015.
- Baskar, Roy et al. *Interdisciplinarity and Climate Change : Transforming Knowledge and Practice for Our Global Future*. London: Routledge, 2010.
- Callard, Felicity and Des Fitzgerald. *Rethinking Interdisciplinarity across the Social Sciences and Neurosciences*. Basingstoke: Palgrave MacMillan, 2015.
- Dalke, Anne, Paul Grobstein, and Elizabeth McCormack, "Theorizing Interdisciplinarity: The Evolution of New Academic and Intellectual Communities."
<<http://serendip.brynmawr.edu/local/scisoc/theorizing.html>>. Accessed April 11, 2010.
- de Beistegui, Miguel, Giuseppe Bianco and Marjorie Gracieuse, eds. *The Care of Life : Transdisciplinary perspectives in Bioethics and Biopolitics*. London: Rowman and Littlefield, 2015.
- Foshay, Raphael, ed. *Valences of Interdisciplinarity : Theory, Practice, Pedagogy*. Edmonton: University of Alberta, 2011.
- Fernandes, Leela. *Transforming Feminist Practice: Non-Violence, Social Justice, and the Possibilities of a Spiritualized Feminism*. San Francisco: Aunt Lute, 2003.
- Frodeman, Robert. *Sustainable Knowledge: A Theory of Interdisciplinarity*. Basingstoke: Palgrave Macmillan, 2014.
- Graff, Harvey J. *Undisciplining Knowledge : Interdisciplinarity in the Twentieth Century*. Baltimore : Johns Hopkins University Press, 2015.
- Hadorn, Gertrude Hirsch et al. eds. *Handbook of Transdisciplinary Research*. London : Springer, 2008.
- Huyssteen, Wentzel Van. *The Shaping of Rationality: Toward Interdisciplinarity in Theology and Science*. Grand Rapids, Mich.: W.B. Eerdmans, 1999.
- Kagan, Jerome. *The Three Cultures: Natural Sciences, Social Sciences, and the Humanities in the 21st Century*. Cambridge: Cambridge University Press, 2009.
- Kessel, Frank, Patricia L. Rosenfield and Norman B. Anderson, eds. *Interdisciplinary Research: Case Studies from Health and Social Sciences*. New York: Oxford University Press, 2008.

- Klein, Julie Thompson. *Interdisciplining Digital Humanities: Boundary Work in an Emerging Field*. Ann Arbor: University of Michigan Press, 2015.
- Lau, Kwok-ying and Chung-Chi Yu, eds. *Border-crossing : Phenomenology, Interculturality and Interdisciplinarity*. Würzburg : Königshausen & Neumann, 2014.
- McDonald, David, Gabriele Bammer, and Peter Deane. *Research Integration using Dialogue Methods*. Canberra: Australian National University E Press, 2009.
- Miller, T.R., et. al, "Epistemological Pluralism: Reorganizing Interdisciplinary Research," *Ecology and Society* 13.2 (2008).
<<http://www.ecologyandsociety.org/vol13/iss2/art46/>> Accessed April 11, 2010.
- Neis, Barbara and John Sutton Lutz, eds. *Making and Moving Knowledge : Interdisciplinary and Community-based Research in a World on the Edge*. Montreal : McGill-Queen's University Press, c2008.
- Pickering, Michael. *Research Methods in Cultural Studies*. Edinburgh: University of Edinburgh, 2008.
- Ross, Fiona. "Degrees of Disciplinarity in Comparative Politics: Interdisciplinarity, Multidisciplinarity and Borrowing." *European Political Science* 8.1 (2009): 26-36.
- Rowland, J. and Robert Frodeman, "De-disciplining the humanities." *Alif: Journal of Comparative Poetics*, Issue 29. <http://csid.unt.edu/files/de-disciplining_the_humanities.pdf>. Accessed April 11, 2010.
- Shiu, Eric, ed. *Creativity Research : an Inter-disciplinary and Multi-disciplinary Research Handbook*. New York : Routledge, 2014.
- Smith, Linda Tuhiwai, Norman K. Denzin, and Yvonna S. Lincoln, eds. *Handbook of Critical and Indigenous Methodologies*. London: Sage, 2008.
- Tileagă, Cristian and Jovan Byford, eds. *Psychology and History : Interdisciplinary Explorations*. Cambridge: Cambridge University Press, 2014.

Some Resources on Thesis Writing and Research Proposals

- Arrows, Four (Don Trent Jacobs), ed. *The Authentic Dissertation: Alternate Ways of Knowing, Research and Representation*. New York: Routledge, 2008.
- Cone, John D. & Foster, Sharon L. *Dissertations and Theses from Start to Finish: Psychology and Related Fields*. American Psychological Association: 1993.
- Lock, Laurence F., Spirduso, Warren W., & Silverman, Samuel J. *Proposals that Work: A Guide for Planning Dissertations and Grant Proposals*. London: Sage, 2007.
- Punch, Kieth. *Developing Effective Research Proposals*. London: Sage, 2006.
- Single, Peg Boyle. *Demystifying Dissertation Writing: A Streamlined Process from Choice of Topic to Final Text*. Sterling: Stylus Publishing, 2009.