

EVDS 501/601, ARST 483 Interdisciplinary Seminar

Fall 2011 (Half course)

Tuesdays and Thursdays, 11:00-13:15, Room ENA 101 (11:00 – 12:15) and
Rooms PFB 2165, 3160, 4140, 3175, 3176, 3177, and 3197 (12:30 – 13:15)

Managers: Dr. Noel Keough, PF – 4176, 220-8588, nkeough@ucalgary.ca
Prof. Graham Livesey, PF – A 3166, 220-8671, livesey@ucalgary.ca

Instructors: Dr. Marco Musiani, PF – 3190, 220-2604, mmusiani@ucalgary.ca
Prof. Barry Wylant, PF – 2104, 220-8456, bwylant@ucalgary.ca

TAs: Keith Robinson, Ovo Adagha, Anna Batebe, Julian Wylegly, Megan Bos, Natalia Dmuchowska

INTRODUCTION

Environmental Design (EVDS) is an interdisciplinary approach to the conceptualization, design and execution of interventions in human and natural environments at a variety of scales – from object to global – and including physical, process and policy interventions. This course will introduce students to four key concepts in Environmental Design: Ecology, Design, Sustainability, and Ethics. The concepts will be introduced and discussed through a broad spectrum of faculty and guest lectures, videos, field trips, discussions, group exercises and assignments.

OBJECTIVES

1. Students will be able to discuss and articulate a range of theoretical perspectives on key concepts of Environmental Design: Ecology, Design, Sustainability, and Ethics
2. Students will be able to articulate their own understanding of key concepts in EVDS and position their understandings in relation to prominent positions and debates within the field.
3. Students will develop diagnostic skills and be able to examine design interventions and articulate the nature of the intervention, key elements of the intervention and its critical design issues.
4. Students will improve their critical, creative and professional written, oral and visual communications skills and demonstrate that their communication skills are commensurate with study at a graduate level.

TEACHING APPROACH

This course will introduce students to a broad range of theoretical and professional perspectives on Environmental Design represented within the faculty of environmental design, the wider university community and professional and community practitioners. This material will be introduced, discussed and debated through lectures, videos, readings, small group discussion, field exposures and hands on exercises. The course will be framed around four key themes: Ecology, Design, Sustainability and Ethics. Topics will be explored predominantly within the spatial context of the Calgary (Bio)Region. The course will introduce students to examples and case studies of design intervention at variety of scales: object, building, neighbourhood, community, city, (bio)region, ecosystem, and biosphere. The course will focus attention on the underlying processes by which physical environments are shaped and evolve.

COURSE EXPECTATIONS AND MEANS OF EVALUATION

Students will be expected to attend all lectures, field trips and discussion sessions. Students will also be expected to read to assigned readings and come to class prepared to discuss the issues and concepts raised in the readings. All papers are to be properly referenced (refer to Plagiarism section at the end of this outline) using the The Chicago Manual of Style format (see www.chicagomanualofstyle.org). Students who have difficulties with writing are referred to the university's Writing Centre.

Students will be expected to complete each of the four course Assignments, and maintain a notebook for the term:

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| 1. makeCalgary 2011 Community Profile Group Assignment | 20% |
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Refer to assignment handout for details. Deadline: September 27.

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| 2. Book Review (1500 words) | 20% |
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Select a book, either from the list included in the course outline, or from a relevant selection of your own choice, and write a critical book review. Examples of book reviews can be found in newspapers (Globe and Mail, Guardian, New York Times, etc.), literary journals (London Review of Books, New York Review of Books, etc.) or academic journals (Journal of Architectural Education, etc.). Deadline: October 25.

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| 3. Essay (1500 words) | 20% |
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Students are required to write a 1500 word essay critically examining a theme or question that has been posed during the course. Students are recommended to discuss with an instructor or TA. Deadline: November 24

4. Pecha Kucha Presentation 20%

Working in teams of 3 students, you are to develop a “Pecha Kucha” presentation (see www.pecha-kucha.org) in one of the four thematic topics. Select a topic and develop a critical take on it. The presentation involves 20 slides (images and/or text) and a verbal presentation. Each image is shown for 20 seconds, for a total presentation of 6 minutes, 40 seconds. Each session will involve 7-8 presentations. Presentations will be graded on content, clarity, continuity, and visual communications. Deadline: Refer to course schedule.

5. Notebook (Lectures, Field Trips, Readings, etc.) 20%

During the semester students are required to maintain a notebook that includes notes taken during lectures, discussion groups, and field trips. It will also contain notes taken from readings, and in preparation of assignments. Observations, images, and sketches may also be included. These will be collected at the end of term for grading. Deadline: December 8.

SCHEDULE AND TOPIC AREAS

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| 1. | Tuesday, September 13, 2011 | <ul style="list-style-type: none"> 1. Lecture: Course Introduction (N. Keough and G. Livesey) (“Slavoj Zizek in Examined Life” - www.youtube.com/watch?v=iGCfiv1xt0U) 2. Sociogram Exercise (N. Keough) <p>Hand out Assignment 1(Make Calgary Project)</p> |
| 2. | Thursday, September 15 | <ul style="list-style-type: none"> 1. Lecture: Calgary – History and Structure (B. Sandalack) 2. makeCalgary assignment <p>Readings 1: Calgary and Region</p> |
| | Saturday, September 17 | Field Trip: 4 Calgary Transects (8 groups) |
| 3. | Tuesday, September 20 | <ul style="list-style-type: none"> 1. Lecture: Calgary and Region (M.-E. Tyler) 2. makeCalgary assignment |
| 4. | Thursday, September 22 | <ul style="list-style-type: none"> 1. Preliminary Review of Assignment 1 2. makeCalgary assignment <p>Readings 2: The Scales of Design</p> |
| 5. | Tuesday, September 27 | <ul style="list-style-type: none"> 1. Lecture: Object to Neighbourhood (B. Wylant) 2. Mindmap Exercise <p>Assignment Due: makeCalgary Project</p> |
| 6. | Thursday, September 29 | No class – makeCalgary 2011: Catalyst |
| | Thursday, September 29 | <p>makeCalgary Symposium: Rob Adams (Melbourne), Andreu Arriola (Barcelona), Ingrid Fettell (New York), Naheed Nenshi (Calgary) and Nancy Pollock-Ellwand (Calgary)</p> <p>makeCalgary 2011: Catalyst: September 29 – October 1, 19:00 hrs.</p> |
| 7. | Tuesday, October 4 | <ul style="list-style-type: none"> 1. Lecture: Ecology 1 – Introduction (M. Musiani) 2. Videos: <i>Coming Home</i> (2002), <i>Natural Connections</i> (1999), <i>Animals are Beautiful People</i> (1974), <i>Winged Migration</i> (2001), <i>Microcosmos</i> (1996), or <i>Ecological Design: Inventing the Future</i> (1994) <p>Readings 3: Ecology</p> |
| 8. | Thursday, October 6 | <ul style="list-style-type: none"> 1. Lecture: Ecology 2 – Social, Political and Economic Ecologies (B. Miller and N. Keough) 2. Discussion Groups |
| | October 10-14 | Block Week |

2. Discussion Groups

- Thursday, December 1 **Design Matters Lecture:** Richard T.T. Forman (Cambridge, Mass.)
23. Tuesday, December 6 1. Panel: **Ethics 3** – Ethics, Environment and Professions
(M. Axworthy, L. Webster, M. Musiani)
2. Discussion Groups
24. Thursday, December 8 1. **Ethics Pecha Kucha Presentations**
Assignment Due: Notebook Hand-in

REQUIRED READINGS

Calgary and Region

Sandalack, B. and A. Nicolai. *The Calgary Project: Urban Form/Urban Life*, University of Calgary Press, 2006, ISBN 1-55238-217-6 (210 pages), 10-27, 104-123.

Refer to the following online documents:

- http://www.calgaryregion.ca/crp/media/70802/crp_environmentreport_page_1-47.pdf
<https://landuse.alberta.ca/Documents/SSRP%20Profile%20of%20the%20South%20Saskatchewan%20Region%20Report-P1-2009-11.pdf>
http://www.salts-landtrust.org/sfs/docs/D_070716_phase_onetwo_report_final.pdf
<http://wsow.brbc.ab.ca/>
http://www.calgary.ca/docgallery/BU/planning/pdf/plan_it/plan_it_workbook.pdf
<http://www.sustainablecalgary.ca/Page-61.html>
<http://www.calgaryregion.ca/crp/projects/projects/calgary-metropolitan-plan.aspx>
<http://www.rockies.ca/files/reports/Ecological%20Infrastructure%20in%20the%20Calgary%20Region%20-%20What%20we%20know%20now.pdf>

The Scales of Design

- Baudrillard, J. "Structures of Interior Design," in *The System of Objects*, Verso, 1996, ISBN 1-85984-068-X (206 pages), 15-29.
- De Certeau, M. "Walking in the City," in *The Practice of Everyday Life*, U. of California Press, 1988, ISBN 0-520-06168-3 (230 pages), 91-114.
- Jacobs, J., "The uses of city neighborhoods," in *The Death and Life of Great American Cities*, Vintage, 1961, ISBN 394-70241-7 (458 pages), 112-140.
- Mumford, L. "The Culture of Cities," in Kasinitz, P., ed., *Metropolis: Center and Symbol of Our Times*, NYU Press, 1995, ISBN 0-8147-4640-3 (496 pages), 21-29.

Ecology

- Kay, James, Henry Regier, Michelle Boyle and George Francis. "An Ecosystem Approach for Sustainability: Addressing the Challenge of Complexity," in *Futures: The Journal of Policy, Planning and Futures Studies* 31, 1999, ISSN: 0016-3287, 721-742.
- Worster, Donald, *Nature's Economy: A History of Ecological Ideas*. Cambridge University Press, 1994, ISBN: 0-521-46834-5 (505 pages), 339-387.
- Peloquin, Claude and Fikret Berkes, "Local Knowledge, Subsistence Harvests, and Social-Ecological Complexity in James Bay," *Human Ecology: An Interdisciplinary Journal*, 37, 2009, ISSN: 0300-7839, 533-545.
- Orr, David, "Design on the Edge: The Making of a High-Performance Building," MIT Press, 2006, ISBN: 0-262-15117-0 (272 pages), 23-57.
- Barry Commoner, "Chapter 2: The Ecosphere," "Chapter 7: Man in the Ecosphere," "Chapter 9: The Technological Flaw," in *The Closing Circle: Man, Nature and Technology*, Bantam Books, 1974 (343 pages), 11-44, 109-122, 138-174.

Design

- Jones, J.C., "What is Designing?" and "The New Methods Reviewed," in *Design Methods*, John Wiley & Sons, 1992, ISBN 978-0-471-28496-3 (408 pages), 3-12, 45-58.
- Buchanan, R., "Wicked Problems in Design Thinking," in Margolin, V. and R. Buchanan, eds., *The Idea of Design*, MIT Press, 1995, ISBN 0-262-63166-0 (286 pages), 3-20.

- Krippendorff, K., "On the Essential Contexts of Artifacts or the Proposition that "Design Is Making Sense (of Things)," in Margolin, V. and R. Buchanan, eds., *The Idea of Design*, MIT Press, 1995, ISBN 0-262-63166-0 (286 pages), 156-184.
- Hawken, P., A. Lovins, and L. Hunter Lovins. "Reinventing the Wheels: Hypercars and Neighborhoods," in *Natural Capitalism: Creating the Next Industrial Revolution*, Little, Brown and Co., 1999, ISBN 0-316-35316-7 (396 pages), 22-47.

Sustainability

- Aylett, Alex, "Participatory Planning, Justice, and Climate Change in Durban South Africa," *Environment and Planning A*, Volume 42, 2010, ISSN: 0308-518X, 99-115.
- Capra, Fritjof, "Part I: Life, Mind and Society," in *The Hidden Connections: Integrating the Biological, Cognitive and Social Dimensions of Life into a Science of Sustainability*, Doubleday, 2002, ISBN: 0-385-49471-8 (300 pages), 1-69.
- Daly, Herman, *Beyond Growth: The Economics of Sustainable Development*, Beacon Press, Boston, 1996, ISBN: 0-8070-4709-0 (253 pages), 25-70.
- Davison, Aidan, "Part I: Sustainable Development: an Ecomodernist Project," in *Technology and The Contested Meanings of Sustainability*, State University of New York Press, 2001, ISBN: 0-7914-4980-7 (281 pages), 1-36.
- Rose, Alex, *Who Killed The Grand Banks: The Untold Story Behind The Decimation of One of the World's Greatest Natural Resources*, John Wiley and Sons Canada, Ltd, 2008, ISBN: 978-0-470-15387-1 (203 pages), 1-43.
- Rees, William. 2010. "The Human Nature of Unsustainability" in Heinberg, R. and D. Lerch, eds., *The Post-Carbon Reader: Managing the 21st Century's Sustainability Crises*, 2010, ISBN: 978-0-9709500-6-2 (523 pages), 194-203.

Ethics

- Wilson, E.O. "The Environmental Ethic," in *Diversity of Life*, W.W. Norton and Co., 1992, ISBN 0-393-31047-7 (424 pages), 343-351.
- Thompson, I., "The Ethics of Sustainability," in Benson, J.F. and M. Roe, eds., *Landscape and Sustainability*, Routledge, 2007, ISBN 978-0-415-40443-3 (320 pages), 16-36.
- Illich, I., "Disabling Professions," in *Disabling Professions*, Marion Boyars, 1979, ISBN 0-7145-2509X (128 pages), 11-29.
- Russ, T.H., "Professional Ethics," in *Sustainability and Design Ethics*, Taylor and Francis, 2010, ISBN 978-1-4398-0854-2 (156 pages), 19-45.
- American Institute of Architects. "2007 Code of Ethics and Professional Conduct."
- Eckersley, R., "Environment Rights and Democracy," in Keil, Bell, Penz and Fawcett, *Political Ecology: Global and Local*, Routledge, Toronto, 1998, ISBN 0-415-18381-2 (387 pages), 353-376.

BIBLIOGRAPHY (Books for Review)

- Abram, D., *The Spell of the Sensuous*.
- Adam, B., U. Beck and J. Van Loon. *The Risk Society and Beyond: Critical Issues in Social Theory*.
- Andric, I. *The Bridge on the Drina*.
- Anielski, M. *The Economics of Happiness*,
- Appadurai, A. *Modernity at Large: Cultural Dimensions of Globalization*.
- Arnold, D.G., ed. *The Ethics of Global Climate Change*.
- Augé, M. *Non-places: Introduction to an Anthropology of Supermodernity*.
- Bachelard, G. *The Poetics of Space*.
- Bateson, G. *Towards an Ecology of Mind*.
- Becon, M., J.L. Harper and C.R. Townsend. *Ecology: From Individuals to Ecosystems*.
- Benyus, J. *Biomimicry: Innovation Inspired by Nature*.
- Botton, A. de. *The Architecture of Happiness*.
- Brockett, R.G. and R. Hiemstra. *Toward Ethical Practice*.
- Brown, V. and J. Harris and J. Russell. *Tackling Wicked Problems Through The Transdisciplinary Imagination*,
- Capra, F. *The Hidden Connections: Integrating the Biological, Cognitive and Social Dimensions of Life into A Science of Sustainability*.
- Commoner, B. *The Closing Circle: Man, Nature and Technology*.
- Daly, H. *Beyond Growth*.
- Davis, M. *Planet of Slums*.
- Davison, A. *Technology and The Contested Meanings of Sustainability*.
- DeLanda, M. *A New Philosophy of Society: Assemblage Theory and Social Complexity*.
- Ehrenfeld, J. *Sustainability by Design: A Subversive Strategy for Transforming Our Consumer Culture*.

Everden, N., *The Natural Alien: Humankind and Environment*.
 Fisher, T. *Ethics for Architects*.
 Foran, M. *Expansive Discourses: Urban Sprawl in Calgary 1945-1978*.
 Franklin, U. *The Real World of Technology*.
 Friedman, J. *Planning in the Public Domain: From Knowledge to Action*.
 Freire, P. *Extension or Communication, in Education for Critical Consciousness*.
 Gardiner, S.M. *A Perfect Moral Storm: The Ethical Tragedy of Climate Change*.
 Gehl, J. *Cities for People*.
 Gladwell, M. *The Outliers: The Story of Success*.
 Goodwin, B. *Nature's Due: Healing Our Fragmented Culture*.
 Gore, A. *Our Choice: A Plan to Solve the Climate Crisis*.
 Haila, Y. and C. Dyke. *How Nature Speaks: The Dynamics of the Human Ecological Condition*.
 Harrison, A. *Making and Thinking: A Study of Intelligent Activities*.
 Harper, T. and S. Stein. *Dialogical Planning in a Fragmented Society*.
 Henderson, H. *Beyond Globalization: Shaping a Sustainable Global Economy*.
 Homer-Dixon, T. *The Upside of Down: Catastrophe, Creativity and the Renewal of Civilization*.
 Jackson, T. *The Earthscan Reader in Sustainable Consumption*.
 Johnson, D. and J. Wetmore. *Technology and Society: Building Our Sociotechnical Future*.
 Jones, J. Christopher. *Design Methods*.
 Kahney, L. *Inside Steve's Brain*.
 Kingwell, M. *Concrete Reveries: Consciousness and the City*.
 Kingwell, M. *The World We Want: Virtue, Vice and the Good Citizen*.
 Koestler, A. *The Act of Creation*.
 Korten, D. *When Corporations Rule the World*.
 Korten, D. *The Post-Corporate World: Life After Capitalism*.
 Leonard, A. *The Story of Stuff: How Our Obsession with Stuff Is Trashing the Planet, Our Communities, and Our Health-and a Vision for Change*.
 Livingston, J. *Rogue Primate: An Exploration of Human Domestication*.
 Lomburg, B. *The Skeptical Environmentalist: Measuring the State of the Real World*.
 Lynch, K. *The Image of the City*.
 Margolin and R. Buchanan. *The Idea of Design*.
 McDonough, W. and M. Braungart. *Cradle to Cradle: Remaking the Way We Make Things*.
 Milani, B. *Designing the Green Economy: The Postindustrial Alternative to Corporate Globalization*,
 Monbiot, G. *Heat: How to Stop the Planet Burning*.
 Munari, B. *Design as Art*.
 Nattrass, B. and M. Altomare. *Dancing with the Tiger: Learning Sustainability Step by Natural Step*.
 Nelson, H. and E. Stolterman. *The Design Way: Intentional Change in an Unpredictable World*.
 Orr, D. *Design on the Edge: The Making of a High-Performance Building*.
 Orr, D. *The Nature of Design*.
 Ostrom, E. *Governing the Commons: The Evolution of Institutions for Collective Action*.
 Parr, A. *Hijacking Sustainability*.
 Perce, G. *Species of Space and Other Pieces*.
 Postman, N. *Technopoly: The Surrender of Culture to Technology*.
 Pye, D. *The Nature of Design*.
 Rose, A. *Who Killed The Grand Banks: The Untold Story Behind The Decimation of One of the World's Greatest Natural Resources*.
 Rowe, P. *Design Thinking*.
 Rybczynski, W. *One Good Turn: A Natural History of the Screwdriver and the Screw*.
 Schon, D. *The Design Studio*.
 Schon, D., *The Reflective Practitioner*.
 Schon, J.B. *Plenitude*.
 Sen, A. *The Idea of Justice*.
 Senge, P. *The Fifth Discipline*.
 Sennett, R. *The Fall of Public Man: On the Social Psychology of Capitalism*.
 Sennett, R. *The Craftsman*.
 Smith, G. *Deliberative Democracy and The Environment*.
 Tenner, E. *Our Own Devices: How Technology Remakes Humanity*.
 Thackara, J. *In the Bubble: Designing in a Complex World*.
 Urry, J. *Global Complexity*.
 Urry, J. *Mobilities*.
 Villiers, M. de. *Water: The Fate of our Most Precious Resource*.
 Walker, S. *Sustainable By Design: Explorations in Theory and Practice*.

Waring, M. *Counting for Nothing: What Men Value and What Women Are Worth*.
Wilkinson, R. and K. Pickett. *The Spirit Level: Why Greater Equality Makes Societies Stronger*.
Wilson, E.O. *The Future of Life*.
Worster, D., *Nature's Economy: A History of Ecological Ideas*.

Related Essays

Aylett, A., "Participatory Planning, Justice, and Climate Change in Durban, South Africa," *Environment and Planning A*, Volume 42, 2010, 99-115.
Casakin, H., "Assessing the Use of Metaphors in the Design Process," *Environment and Planning B*, Volume 33, 2006, 253-268.
McDonough, W. and M. Braungart. "The Next Industrial Revolution," in *Atlantic Monthly* (October 1998).
Miller, B., "Collective Action and Rational Choice: Place, community, and the Limits of Individual Self-Interest," *Economic Geography*, Volume 68, Number 1, 1992, 22-42.
Orr, D., "Architecture, Ecological Design, and Human Ecology," in Tanzer, K. and R. Longorio, eds., *The Green Braid: Towards an Architecture of Ecology, Economy, and Equity*.

Youtube/Interviews

Dieter Rams: www.youtube.com/watch?v=ncw3f4jgNP4&feature=related
Bruce Mau: www.youtube.com/watch?v=FnNJ_zMOan0
Michael Sorkin: www.youtube.com/watch?v=n3CI7PL6Oo
Ross Lovegrove: www.youtube.com/watch?v=sWqkKYwvTNw
Janine Benyus: www.youtube.com/watch?v=n77BfxnVlyc&feature=relmfu
David Orr: www.youtube.com/watch?v=RnGtr2n23YY
Peter Eisenman: www.cbc.ca/ideas/episodes/features/2010/09/21/wachtel-on-the-arts-4/

GRADING SCALE

At the discretion of the instructor, assignments submitted after the deadline **may** be penalized with the loss of a grade (e.g.: A- to B+) for each day late. The following equivalencies will be used in determining grades: **A+** (92-100); **A** (87-91.9); **A-** (82-86.9); **B+** (77-81.9); **B** (72-76.9); **B-** (67-71.9); **C+** (62-66.9); **C** (57-61.9); **C-** (52-56.9); **D+** (47-51.9); **D** (42-46.9); **F** (0-41.9).

NOTES

1. Written work, term assignments and other course related work may only be submitted by e-mail if prior permission to do so has been obtained from the course instructor.
2. It is the student's responsibility to request academic accommodations. If you are a student with a documented disability who may require academic accommodation and have not registered with the Disability Resource Centre, please contact their office at 220-8237. (<http://www.ucalgary.ca/drc/node/46>) Students who have not registered with the Disability Resource Centre are not eligible for formal academic accommodation. You are also required to discuss your needs with your instructor no later than fourteen (14) days after the start of this course.
3. Plagiarism - Plagiarism involves submitting or presenting work in a course as if it were the student's own work done expressly for that particular course when, in fact, it is not. Most commonly plagiarism exists when:(a) the work submitted or presented was done, in whole or in part, by an individual other than the one submitting or presenting the work (this includes having another impersonate the student or otherwise substituting the work of another for one's own in an examination or test),(b) parts of the work are taken from another source without reference to the original author,(c) the whole work (e.g., an essay) is copied from another source, and/or,(d) a student submits or presents work in one course which has also been submitted in another course(although it may be completely original with that student) without the knowledge of or prior agreement of the instructor involved. While it is recognized that scholarly work often involves reference to the ideas, data and conclusions of other scholars, intellectual honesty requires that such references be explicitly and clearly noted. Plagiarism is an extremely serious academic offence. It is recognized that clause (d) does not prevent a graduate student incorporating work previously done by him or her in a thesis. Any suspicion of plagiarism will be reported to the Dean, and dealt with as per the regulations in the University of Calgary Graduate Calendar.
4. Information regarding the Freedom of Information and Protection of Privacy Act (<http://www.ucalgary.ca/secretariat/privacy>) and how this impacts the receipt and delivery of course material
5. Emergency Evacuation/Assembly Points (<http://www.ucalgary.ca/emergencyplan/assemblypoints>)
6. Safewalk information (<http://www.ucalgary.ca/security/safewalk>)
7. Contact Info for: Student Union (<http://www.su.ucalgary.ca/page/affordability-accessibility/su-structure/contact-info>); Graduate Student representative(<http://www.ucalgary.ca/gsa/>) and Student Ombudsman's Office (<http://www.su.ucalgary.ca/page/quality-education/academic-services/student-rights>).