Course Outline ASCI 4020 Topics in Arts & Science Research

Interdisciplinary Research: Dialogues on Philosophy and Practice

Instructor: Laurie A. Manwell
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Class Time & Room: Wednesdays 7:00PM-9:50PM, ROZH 108
Office Hours: Wednesdays before class or by appointment; MACK 050 or 044

Course Description:

In his treatise on Consilience: The Unity of Knowledge, E.O. Wilson explores one of the cornerstones of interdisciplinary research, the proposition that, “Every college student should be able to answer the following question: What is the relation between science and the humanities, and how is it important for human welfare?” We will approach this question within the tradition of the Socratic method of inquiry through a series of interdisciplinary dialogues.

We will explore the various ways in which academic inquiry can integrate seemingly disparate areas into a cohesive whole, thus providing the impetus and potential to revolutionize research and education in ways that can benefit humanity. You are all invited to participate in cordial and thought-provoking dialogues intended to facilitate discussion, understanding, and collaboration between disciplines. Some of the many topics that will be covered will include the following:

- How to identify and address potential “unknowns” in the early stages of interdisciplinary research (e.g., finding out what you don’t know that you need to know in a new field)
- Consequences of non-integration of scientific inquiry, ethics, and social policy in democratic societies (e.g., disputes between different disciplines on policy issues)
- How to identify, contrast, and integrate concepts from both the physical (e.g., mechanical, biological) and metaphysical (e.g., philosophical, spiritual) theories of mind
- How to integrate research related to neuropsychology, such as the biological, psychological, and sociological perspectives, and relevance to social policy-making
- Dialogues on science education, religion, and the natural and social sciences; specifically, how each inform us on the nature and function of belief systems, human behavior, and challenges for social policy; the future of consilience in education

REQUIRED Books:
Learning Objectives:

The main goal is to help students develop a comprehensive understanding of how to initiate, build and strengthen bridges between disciplines within the arts and sciences. The first four weeks of the course will be devoted to exploring Wilson’s question, in particular using neuroscience as an example; students will become familiar with the underlying principles of how the mind works – both at the physical and metaphysical levels – and the areas of consilience between them. In subsequent weeks, we will have a series of dialogues and debates for the purposes of demonstrating how to shift from philosophy to practice. The remaining weeks of the course will be devoted to further exploring more explicit examples of interdisciplinary study, such as in the areas of drug addiction and war, and reserve time for students to discuss and present the class project process, content, goals and outcome.

Course Approach:

ASCI 4020 is an intensive course in interdisciplinary research that will encourage students to explore the relationship between their fields of expertise and many other disciplines. It will be fast paced and encourage students to challenge their basic assumptions about the future of interdisciplinary study – synthesis; as Wilson (1998, p. 294) has stated, “we are drowning in information, while starving for wisdom.” Hence, this course inherently requires a significant amount of reading and discussion for the purposes of synthesizing information from different disciplines; in return, students will be assessed predominantly on their preparedness and enthusiasm in participating in class discussions of the readings. The first four weeks will be devoted to readings from Wilson (1998) and Doidge (2007) which will provide a solid foundation for exploring interdisciplinary research. In the following five weeks, we will look at examples from Maté (2008) and Dallaire (2010) on how to use scientific research to answer humanitarian problems that we face today, specifically relating to the development of drug addiction and the effects of war on child development. In the final weeks, we will return to neuroscience and Harris (2010) to debate its potential to answer questions of morality and integrate disparate sections of society to forge a more humanitarian road towards the future. This course will encourage and support highly independent student initiative in order to prepare students to become innovative thinkers and leaders who will forge bridges between disciplines of study for the advancement of science and humanity. Students will also be given time in class to work on the summative project under my supervision. Students are encouraged to learn from classmates’ expertise in disciplines other than their own and expected to share their expertise.

Formal Assessment:

The purpose of this course is to expose students to ideas that will revolutionize interdisciplinary research; however, these ideas are increasingly complex and sophisticated and thus require a broader context within which to understand them. Thus, there will be a significant amount of reading and discussion required to analyze these ideas. Accordingly, students will be graded largely on preparation and participation. Students can achieve a B+ by reading and preparing notes for discussions that summarize the key points and relate to the assigned reflections. To receive an A+, students should extend their analysis to include connections to their own disciplines and other areas of study and a greater-world context, providing explicit examples in class. In addition, strong interdisciplinary research requires autonomy, initiative, and innovation; these criteria need to be reflected in the summative project to receive at least a B level grade.
In general, grades advance or drop depending on both content and style; for an A-/A/A+, the project must demonstrate exceptional thoughtfulness, reasoning, and presentation. “A” projects involve difficult and time-consuming work – and a tremendous investment in your education and development! A solid “B” is a mark of achievement which reflects critical reasoning and/or thorough research and solid writing skills. Again, a key component of successful interdisciplinary research is autonomy and initiative. As such, students will be given an opportunity to practice this throughout the course. Thus, formal assessment, as described in this course outline, is negotiable; in fact, students are encouraged to suggest both alternative assignments, methods of assessments and grade weightings at the beginning of the course. In this case, the instructor will negotiate assignment weighting, which will include seminar notes/reflections, class participation and a summative project. Students are required to have completed assigned readings – and bring them to class - prior to each class and be prepared to participate in whole class discussions. As such, students will be required to attend 75% of all lectures just to pass the course. In cases of medical or otherwise compassionate circumstances, students should contact the instructor to determine what arrangements can be made to ensure that course requirements are met and students successfully pass the course.

Course Requirements Are As Follows:

1) **Reading Journal: 40%**
   (All classes; Formally assessed Feb. 13 (30%) & Mar. 27 (10%))

2) **Participation/Professionalism: 20%**
   (All classes; Formally assessed Feb. 13 (10%) & Apr. 3 (10%))

3) **Class Project Process Evaluation: 20%**
   (Team Proposal: 5%; Team Mark: 10%; Individual Mark: 5%)
   (Formally assessed Jan. 16 (5%) and Apr. 3 (15%))

4) **Class Project Final Product: 20%**
   (Individual/Team Proposal: 5%; Whole Class Mark: 5%; Individual Mark: 10%)
   (Formally assessed Jan. 23 (5%) and Apr. 3 (15%))

**Course Website:**
There is a course website at [http://courselink.uoguelph.ca](http://courselink.uoguelph.ca) that is password protected and is mandatory for meeting course objectives, including assignments and lecture preparation. Students are expected to familiarize themselves with the website and to contact the instructor and classmates between classes.
**Reading Journal:**

Students will complete a reading journal throughout the term that will be formally assessed at 30% on Week 6 (Feb. 13) and at 10% on Week 11 (Mar. 27). The assessments are not cumulative, meaning that work not completed by the first assessment date will not be assessed at the second assessment date. Students are encouraged to complete the assigned reading guide questions each week and bring the reading journal to class as a prompt for any discussions that we have during class and to record additional notes. The purpose of this assessment tool is: a) to increase discussion participation by having prepared notes to refer to in class, b) for both students and the instructor to reflect on what students learned in each class, c) to practice communicating ideas in both written and oral form, and d) for students to have a series of notes to also use to provide ideas for the class project. The reading journal can be downloaded from Courselink (word and/or pdf format) and students can either type or hand-print notes in the journal. Note that the reading guide must be legible – if I cannot read it then I cannot fairly assess it and a mark of zero will be assigned. Emailed journals will not be accepted, no exceptions. REFER TO APPENDIX A FOR MARKING RUBRIC

**Participation and Professionalism:**

Each week students are expected to participate fully and in a professional manner; for example, reviewing assigned readings, offering and challenging ideas, asking questions and demonstrating interest and respect towards peers and their ideas. Time will also be provided in seminars to focus on the class project – these work periods are mandatory and marks will be deducted if missed (e.g., if you leave early). If you must miss a class, please contact the instructor immediately with the appropriate documentation and be prepared to make up any missed work. You are responsible for finding out what you missed and how to make up missed work. Computers and other electronic devices are permitted in class ONLY for course-related work; any other use will be regarded as unprofessional and indicative of non-participation and graded accordingly. Students are to be respectful of and engage fully in the university learning environment as a place to demonstrate higher order thinking skills involving analysis, evaluation and synthesis of knowledge. Students will be formally assessed (10% each) on Week 6 (Feb. 13, 10%) and Week 11 (Apr. 3, 10%). REFER TO APPENDIX B FOR MARKING RUBRIC

**Learning Contract:**

1. Everyone has the *right to learn* and the *responsibility* not to deprive others of this right.
2. Every student is accountable for his or her own actions
3. In order for you to get the most out of this class, please consider the following:
   - Attend all scheduled classes and arrive on time prepared with notes.
   - **Laptops and other devices are restricted to class-related activities only.**
   - Late arrivals and early departures are very disruptive.
   - Please let the instructor know *immediately* if you have a problem that is preventing you from performing satisfactorily in this class.
Class Project:

As a class, we will design and self-publish an anthology that is based on answering E.O. Wilson’s question: “What is the relation between science and the humanities, and how is it important for human welfare?” The project will be evaluated for the content (20%) and for the process (20%). The requirements of the class project are as follows:

Class Project Process Evaluation: 20%

The class will divide up into four teams responsible for one of the following:

- Agents of the Anthology (How to Self-Publish on Amazon)
- Organizers of Content (Title Page, Table of Contents, Structure of Content)
- Editors of Content (Proofreading and Editing)
- Promoters of the Anthology (Promotion, Finances and Revenue Allocation)

Team Process Proposal: 5%
- Each team will write a one- to two-page proposal outlining the purpose and goals of their team and how they will divide up the work to achieve those goals throughout the semester with specific deadlines
- Each member will sign it as a contract to be completed
- Due on Week 2 (Jan. 16) at the beginning of class
- REFER TO APPENDIX C

Team Evaluation: 10%
- Each team will be evaluated on how they achieved the goals of their team as outlined in the proposal contract
- Students are encouraged to keep a logbook of their work for the instructor to consider in the final evaluation
- Due on Week 12 (Apr. 3) at the beginning of class
- REFER TO APPENDIX E FOR MARKING RUBRIC

Individual Evaluation: 5%
- Each student will be evaluated on how he/she contributed to the team goals
- Students will fill out the peer evaluation sheet and marks will be averaged for 5% of the grade; the instructor will provide the additional mark out of 5%
- Due on Week 12 (Apr. 3) at the beginning of class
- REFER TO APPENDIX E FOR MARKING RUBRIC
Class Project Final Product Evaluation: 20%
Each student will contribute to the content, either individually or in collaboration with peers.

Individual/Team Content Proposal: 5%
- Each individual/group will write a one- to two-page proposal outlining the how his/her/their contribution will answer Wilson’s question, how the work will be divided up in order to achieve those goals throughout the semester with specific deadlines
- Each student will sign a proposal as a contract to be completed
- Due on Week 3 (Jan. 23) at the beginning of class
- REFER TO APPENDIX D FOR MARKING RUBRIC

Whole Class Evaluation: 5%
- Whole class will evaluated as a team on the final product of the project
- We will review the final product as a class and students will have an opportunity to evaluate the final product and suggest an appropriate grade
- Due on Week 12 (Apr. 3) in class
- REFER TO APPENDIX E FOR MARKING RUBRIC

Individual Evaluation: 10%
- Each student will be evaluated on how he/she contributed to the class project
- Students will fill out the peer evaluation sheet and marks will be averaged for 5% of the grade; the instructor will provide the additional mark out of 5%
- Due on Week 12 (Apr. 3) at the beginning of class
- REFER TO APPENDIX E FOR MARKING RUBRIC

Suggestions for contributions include, but are not limited to, the following:

- Must be in some type of recorded format compatible with final document to be published; pre-approved by instructor and answers Wilson’s question in a clear manner
- Audio CD or video DVD included with book (if possible)
- Written report/review, survey, research project or grant proposal; Interview with transcript
- Poetry, song, reflection, dramatic dialogue, debate,
- Artwork (painting, drawing, digital artwork, book cover design)
- Proposals for conference, humanitarian project, student-led organization, or community out-reach project; proposal for documentary
- Research projects involving human participants, including but not limited to surveys, questionnaires, and interviews, must conform to the Office of Research’s Ethical Guidelines and be approved by the instructor (see Appendix X for specific instructions)
- Other options: write a collaborative journal article for submission to a peer reviewed journal; hold a student conference and/or video recording uploaded to a class created website; create a handbook of notes for the course itself for future classes; etc…
- Instructor will facilitate & provide class time to work on class project throughout the term
- Include plans and dates as a framework for successfully completing the assignment, including the date and format of content contribution
- Be as innovative and creative as you can imagine! 😊
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<tr>
<th>Class</th>
<th>Topic/Theme</th>
<th>Required Readings and Reflection Questions</th>
<th>Discussion Topics</th>
<th>Optional Resources</th>
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| WK 1  | Introduction to Interdisciplinary Research in the Arts and Sciences | Introductions and Course Overview  
*Lecture begins*  
**Reflection:**  
Record some of your initial thoughts on Wilson’s question before we begin the course. Describe one of the dominant paradigms in your current discipline and one from another discipline that you are less familiar with. What methods of analysis would you use to explore the validity of each one? What questions would you ask to find a bridge to integrate these paradigms – or forge new ones?  
Read Wilson (1998) Ch. 1-6 (p. 3-135)  
- The Ionian Enchantment (p. 3)  
- The Great Branches of Learning (p. 8)  
- The Enlightenment (p. 15)  
- The Natural Sciences (p. 49)  
- Aridane’s Thread (p. 72)  
- The Mind (105)  
**Reflection:**  
Similar to Plato’s Allegory of the Cave, Wilson discusses how his new worldview unchained him from his old worldview (p. 6-7). Did he completely resolve his cognitive dissonance? Why or why not? Why does he continually return to this change in worldview in the book?  
Wilson also states that, “the ongoing fragmentation of knowledge and resulting chaos in philosophy are not reflections of the real world but artifacts of scholarship” (p. 8). Discuss what this means using examples from more than one discipline.  
What does “reciprocity of mind and body mean”? (p.124) How can different perspectives on the mind be integrated? What does the Turing test tell us? (p. 132) What does it mean to be human? | - Importance of asking meaningful questions  
- Main sources of error in scientific inquiry and communication  
- The war between faulty belief and reality: escape and return to Plato’s cave of shadows  
- The “general will” as a “deadly abstraction” and consequences of untested beliefs to society  
-Francis Bacon’s “idols of the mind” - the fallacies that undisciplined thinkers are derailed by – and how dominant paradigms impeded real progress  
-The Mind – integrating biological, psychological and philosophical perspectives | - Visit Edge (www.edge.org): “To arrive at the edge of the world’s knowledge, seek out the most complex and sophisticated minds, put them in a room together, and have them ask each other the questions they are asking themselves.”  
- Review some of the Edge questions in Brockman’s (2007) *What is Your Dangerous Idea?*  
Dialogue between Edward Wilson and Steve Pinker on Consilience, Biology and Neuropsychology – C-SPAN interview: [http://www.c-spanvideo.org/program/105448-1](http://www.c-spanvideo.org/program/105448-1)  
**Team Proposals Due in Class (5%)**

*Read Wilson (1998) Ch. 7-12 (p. 136-326)*
- From Genes to Culture (p. 136)
- The Fitness of Human Nature (p. 178)
- The Social Sciences (p. 197)
- The Arts and Their Interpretation (p. 220)
- Ethics and Religion (p. 260)
- To What End (p.291)

**Reflection:**
Wilson asks, “What, in final analysis, joins the deep, mostly genetic history of the species as a whole to the more recent cultural histories of its far-flung societies?” (p. 137)

Describe two major considerations to keep in mind about the endpoints of research that attempts to bridge gaps between disciplines.

Wilson states, “The prospect of this “volitional evolution” – a species deciding what to do about its own heredity – will present the most profound intellectual and ethical choices humanity has ever faced.” (p. 299) How can we start to address these choices and what consequences do we face if we fail to address them sooner rather than later?

- Gene-culture coevolution
- Basic unit of culture - Meme
- Role of memory in culture
- Interaction between heredity and environment across time and space
- Ethics and Religion: A debate between a Transcendentalist and an Empiricist
- Applying these principles to current sociobiological conditions worldwide today

- Panel Discussion with Wilson on The Human Prospect at a Time of Profound Concern about the Future of the Planet: [http://www.youtube.com/watch?v=6bP5zQDvMe8&feature=related](http://www.youtube.com/watch?v=6bP5zQDvMe8&feature=related)

- The Darwin Festival at Cambridge University (2009): Total of 29 videos on the following topics:
  - Darwin’s Universal Impact (July 6); Society and Health (July 7); Human Nature and Belief (July 8); Darwin and Modern Science (July 9); What Does the Future Hold? (July 10):


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<th>WK 3</th>
<th>Jan. 23</th>
<th>Interdisciplinary Behavioural Neuroscience Part 1: Neuroplasticity and Self</th>
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<td><em>Individual/Team Content Proposals Due in Class 5%</em></td>
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<td>- Ch. 1: A Woman Perpetually Falling (p.1)</td>
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<td>- Ch. 2: Building Herself a Better Brain (p. 27)</td>
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<td>- Ch. 3: Redesigning the Brain (p.45)</td>
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<td>- Ch. 4: Acquiring Tastes and Loves (p. 93)</td>
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<td>- Ch. 5: Midnight Resurrections (p. 132)</td>
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<td>- Ch. 6: Brain Lock Unlocked (p. 164)</td>
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<td><strong>Reflection:</strong></td>
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<td>Why was the idea of brain plasticity resisted by mainstream science for over 50 years? What lessons can we learn for future research that challenges dominant paradigms?</td>
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<td>Regarding the brain, what is the “plastic paradox” and what are some of its consequences in the real world?</td>
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<td><strong>Interview with Norman Doidge on TVO:</strong> <a href="http://www.youtube.com/watch?v=t3TQopnNXBU">http://www.youtube.com/watch?v=t3TQopnNXBU</a></td>
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<td><strong>Vilayanur Ramachandran on TED Talk on Neurons that Shaped Civilization:</strong> <a href="http://www.ted.com/talks/lang/en/vs_ramachandran_the_neurons_that_shaped_civilization.html">http://www.ted.com/talks/lang/en/vs_ramachandran_the_neurons_that_shaped_civilization.html</a></td>
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<th>WK 4</th>
<th>Jan. 30</th>
<th>Interdisciplinary Behavioural Neuroscience Part 2: Neuroplasticity and Humanity</th>
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<tr>
<td></td>
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<td><strong>Read Doidge (2007) (p. 177-319)</strong></td>
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<td>Ch. 7: Pain (p. 177)</td>
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<td>Ch. 8: Imagination (p. 196)</td>
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<td>Ch. 9: Turning Our Ghosts into Ancestors (p.215)</td>
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<td>Ch. 10: Rejuvenation (p.245)</td>
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<td>Ch. 11: More than the Sum of Her Parts (p. 258) Appendices (p. 287)</td>
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<td><strong>Reflection:</strong></td>
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<td>Why does Doidge emphasize that Freud first proposed what is now referred to as Hebb’s law? Why does he also emphasize Kandel’s biography in relation to his scientific accomplishments? What happens to the brain – and to people – when learning is impeded? What is the purpose of an “enriched environment”? How could “enriched cultures” shape the evolution of the human brain in the future?</td>
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<td><strong>Discussions regarding implications for:</strong></td>
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<td>human learning; culture, history and imagination; the future of the human mind; neuronal stem cells; psychoanalysis as a neuroplastic therapy; and the potential of the human brain in the future</td>
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<td><strong>SFN’s Brain Research: How researchers and elected officials can work together to fund and advance successful treatments for neurological disorders:</strong> <a href="http://www.sfn.org/index.cfm?pagename=brainResearchSuccessStories">http://www.sfn.org/index.cfm?pagename=brainResearchSuccessStories</a></td>
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<td><strong>Steve Pinker on TED Talk on The Blank Slate:</strong> <a href="http://www.ted.com/talks/lang/en/steven_pinker_chalks_it_up_to_the_blank_slate.html">http://www.ted.com/talks/lang/en/steven_pinker_chalks_it_up_to_the_blank_slate.html</a></td>
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Read Maté (2008) Parts I-III (p. 7-175):
- Pt 1: Hellbound Train (p.7)
- Pt 2: Physician, Heal Thyself (p. 101)
- Pt 3: Different State: The Addicted Brain (p. 127)

**Reflection:** What is a nonmothetic-idiographic dichotomy? How does Maté attempt to resolve this dichotomy and integrate multiple perspectives in his thesis on the addiction-prone personality? How does Maté (2008) integrate the sociocultural perspectives on drug addiction with scientific studies of brain and personality development? How are animal models useful in understanding human behaviour?

What questions do you have after reading about Dr. Alexander’s Rat Park research and his report to the Canadian Senate on the “Myth of Drug-Induced Addiction”?

In response to one of Maté patients, who confided that, “the first time I did heroin it felt like a warm soft hug,” Maté states in the book the following: “In that phrase she told her life story and summed up the psychological and chemical cravings of all substance-dependent addicts.” (p. 157)

Discuss in detail what Maté’s argument is and how and why he integrates the science of addiction with personal biographies of addiction to frame his conceptualizations of human behaviour.


American Drug War: http://topdocumentaryfilms.com/american-drug-war/


Peter Dale Scott: Drugs, Oil and War: http://www.youtube.com/watch?v=pTpTYAjJ3zQ

*Reading Journal Assessment (30%) and Participation Self-Assessment in Class (10%)*

- Pt 4: How the Addicted Brain Develops (p. 229)
- Pt 5: The Addition Process and Personality (p. 213)

**Reflection:** Discuss the effects of Adverse Childhood Experiences (ACEs) on early brain development in humans and animals. Discuss some of the research that indicates that parents’ behaviour has a significant effect on children’s personalities. Describe how these early life experiences shape personality. What is proximate separation and what impact has research demonstrated that it has on early psychophysiological development?

The effects of anxiety and fear on neuroplasticity, learning and behaviour

Disease model of drug and alcohol addiction

George Koob on the Neurobiology of Addiction: http://www.youtube.com/watch?v=kroyVIL7i8Q
<table>
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<tr>
<th>WK 7</th>
<th>Feb. 20</th>
<th>No Class</th>
<th><strong>Reading Week</strong></th>
<th>Sleep In!!! 😊</th>
<th>Enjoy The Break!!! 😊</th>
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| **Feb. 27** | **WK 7** | **The Nature of Addiction Part 3: Causes, Consequences, and Consilience** | **First Reading Journal Assessments and Participation Marks Returned in Class** | The effects of abuse, depression, and poverty on neuroplasticity, learning and behaviour | Democracy Now interviews with Gabor Maté on the Stress-Disease Connection, Addiction, Attention Deficit Disorder, and the Destruction of American Childhood: [http://www.democracynow.org/2010/12/24/dr_gabor_mat_on_the_stress](http://www.democracynow.org/2010/12/24/dr_gabor_mat_on_the_stress)  
| | | | **Read Maté (2008) Parts V-VII (p. 248-426):**  
-Pt 6: Imagining a Humane Reality: Beyond the War on Drugs (p. 248)  
-Pt 7: The Ecology of Healing (p. 329)  
-Epilogue/Appendices (p. 399) | **Reflection:** |  |
| | | | | Discuss Maté’s views on addiction and social policy: Why would you agree or disagree with that position? |
| | | | | Taking the position of a politician, what additional scientific information would you require in order to make the most informed social policies? |
| | | | | What is the next step? |
| | | | | The philosophy of neuroethics and how social issues are influenced by our conceptions of the mind as a biological machine |
| **WK 8**  | Feb. 28 | **A Canadian General and Senator’s Answer to Wilson’s Question Part 1** | **Read Dallaire (2010) (p. 1-151):**  
-Introduction (p.1)  
- Ch.1: Warrior Boy (p. 17)  
- Ch 2: Little Soliders, Little Killers (p. 31)  
- Ch 3: Kidom (p. 47)  
- Ch.4: Kidom Lost (p. 67)  
- Ch.5: How a Child Soldier is Made (p. 104)  
- Ch. 6: How a Child Soldier is Trained & Used (p. 131) | The social, biological, geopolitical, and neuropsychological engineering of child soldiers as weapons of the future. |
| | | | | TVO interview with Roméo Dallaire on Child Soldiers: [http://www.youtube.com/user/AllanGregg#/p/search/0/6O5WsuxuFeA](http://www.youtube.com/user/AllanGregg#/p/search/0/6O5WsuxuFeA)  
and [http://www.youtube.com/user/AllanGregg#/p/search/1/ZP AJP2v3q8s](http://www.youtube.com/user/AllanGregg#/p/search/1/ZP AJP2v3q8s) |
| | | | | The effects of abuse, depression, and poverty on neuroplasticity, learning and behaviour |
| | | | | The philosophy of neuroethics and how social issues are influenced by our conceptions of the mind as a biological machine |

**Reflection:**  
Based on your knowledge about brain plasticity, discuss the effects of conditioned fear and drug exposure during neurodevelopment for child soldiers.  
How does Dallaire also use research and narrative to create a more complete account of human nature?
- Ch.7. How to Unmake a Child Soldier (p.152)  
- Ch 8: The Moment: Killing a Child Soldier (p. 185)  
- Ch 9: The Child Soldiers Initiative (p. 207)  
- Ch.10: What You Can Do (p. 234)  
- Appendices (p. 265-300) | Synthesis and the evolution of human rights  
- Reconciliation, rehabilitation, accountability and justice  
- The future of human nature | TVO interview with Ishmael Beah, a former Child Soldier: [http://www.youtube.com/user/AllanGregg#p/search/2/5kEL_LRBSqk](http://www.youtube.com/user/AllanGregg#p/search/2/5kEL_LRBSqk) |
- Introduction: The Moral Landscape (p. 1)  
- Ch. 1: Moral Truth (p. 27)  
- Ch. 2: Good and Evil (p. 55) | Psychology of Morality and Religion | The Four Horsemen: [http://topdocumentaryfilms.com/four-horsemen/](http://topdocumentaryfilms.com/four-horsemen/)  
- Faith on Trial: Is Religion a Force for Good or Evil?  
- Al Jazerra interview with Richard Dawkins: [http://www.informationclearinghouse.info/article33420.htm](http://www.informationclearinghouse.info/article33420.htm) |
| WK 11 | Faith and Science Part 2: How Should We Determine Human Values? | Read Harris (2010) (p. 113-191): -Ch. 3: Belief (p. 113) -Ch. 4: Religion (p. 145) -Ch. 5: The Future of Happiness (p. 177) | Reflection Question: How does Harris conceptualize moral truth in terms of brain processing mechanisms? Do we have “freedom of belief”? Why or why not? How and why has the growth of institutions (e.g., government, academia, science societies, media, etc…) made science *more and less* influential in society? Provide an example of each. Do scientists, particularly psychologists, have a legal, ethical or moral obligation to inform citizens when they are being manipulated into forfeiting their rights in a democratic society? Why or why not? How should society deal with disputes between scientists and government? | Social Policy Utilitarianism Utopian Societies | Talk by Sheldon Solomon on The Denial of Death: [http://www.bing.com/videos/search?q=in+denial+of+death+&qpvt=in+denial+of+death+&mid=47536FFD8E89CD A9050B47536FFD8E89CD A9050B&FORM=LKVR5](http://www.bing.com/videos/search?q=in+denial+of+death+&qpvt=in+denial+of+death+&mid=47536FFD8E89CD A9050B47536FFD8E89CD A9050B&FORM=LKVR5) Flight From Death: The Quest for Immortality [http://wp.flightfromdeath.com/](http://wp.flightfromdeath.com/) |
| WK 12 | Last Class | Class Project Presentation and Review Submit Logbooks/Journals Year End Celebration!! 😊 | | |
| Apr. 3 | | | | |
Relevant Rules and Regulations

Late Policy
The penalty for late assignments handed in on the same day but AFTER the designated time period (i.e. during class) is 2%. After that, a 5% penalty is applied each day (including Saturday and Sunday).

Communication
As per university regulations, all students are required to check their <uoguleph.ca> e-mail account regularly. E-mail is the official route of communication between the university (including your instructor) and its students. We will also be using CourseLink as a means of communication. You are already enrolled in the course’s portal, which can be accessed from the University’s home page by clicking “CourseLink.”

Incomplete Course Requirements
When you find yourself unable to meet a course requirement because of illness or personal difficulties, please advise the course instructor in writing. Where possible, this should be done in advance of the missed work or event, but otherwise, as soon as possible. The instructor may request appropriate documentation. Such documentation will rarely be required for courses components representing less than 10% of the course grade. Such documentation will be required for Academic Consideration for missed end-of-term work and missed final exams. For more information on regulations and procedures for Academic Consideration, please refer to the Undergraduate Calendar (http://www.uoguelph.ca/undergrad_calendar/08_ac.shtml) or the BAS Counseling Office Website (http://www.uoguelph.ca/baco).

Academic Misconduct
The University of Guelph takes a very serious view of Academic Misconduct, and it is your responsibility as a student to be aware of and to abide by the University’s policy. Academic misconduct includes plagiarism, cheating on examinations, misrepresentation, and submitting the same material in two different courses without written permission. All submitted work is expected to have been done independently by the student. Anyone suspected of academic misconduct will have his or her case reviewed by the Associate Dean (i.e. it’s out of your instructor’s hands!) and may result in serious penalties, up to and including expulsion from the University. There are no warnings or second chances with respect to academic misconduct. To better understand your responsibilities regarding appropriate academic conduct, read the Undergraduate Calendar (http://www.uoguelph.ca/undergrad_calendar01.shtml) for a statement of Students’ Academic Responsibilities; also read the full Academic Misconduct Policy (http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml). If you are ever concerned about inadvertently misrepresenting yourself, for example, when doing group assignments or quoting from texts, you are advised to make use of the resources available through the Learning Commons (http://learningcommons.uoguelph.ca/) and to discuss the matter with your course instructor, TA, or academic counselor.
Drop Date
The last date to drop one-semester Winter 2013 courses, without academic penalty, is Friday March 8, 2012. For regulations and procedures for Dropping Courses, see the Undergraduate Calendar.(http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c03/c03-wintersem.shtml)

Copies of Out-of-Class Assignments
Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time For more detailed information about these and other regulations, see Chapter VIII Undergraduate Degree Regulations and Procedures of the 2011-2012 University of Guelph Undergraduate Calendar (http://www.uoguelph.ca/registrar/calendars/undergraduate/current/)

Description of Grades

By now, you are probably familiar with the University’s grading scheme:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>90-100%</td>
<td>C</td>
</tr>
<tr>
<td>A</td>
<td>85-89</td>
<td>C-</td>
</tr>
<tr>
<td>A-</td>
<td>80-84</td>
<td>D</td>
</tr>
<tr>
<td>B+</td>
<td>77-79</td>
<td>D-</td>
</tr>
<tr>
<td>B</td>
<td>73-76</td>
<td>F</td>
</tr>
<tr>
<td>B-</td>
<td>70-72</td>
<td></td>
</tr>
</tbody>
</table>

But how do you get an A in this course?

The purpose of this course is to expose students to ideas that will revolutionize interdisciplinary research; however, these ideas are increasingly complex and sophisticated and thus require a broader context within which to understand them. Thus, there will be a significant amount of reading and discussion required to analyze these ideas. Accordingly, students will be graded largely on preparation and participation. Students can achieve a B+ by reading and preparing notes for discussions that summarize the key points and relate to the assigned reflections. To receive an A+, students should extend their analysis to include connections to their own disciplines and other areas of study and a greater-world context, providing explicit examples in class. In addition, strong interdisciplinary research requires autonomy, initiative, and innovation; these criteria need to be reflected in the summative project to receive a B level grade. In general, grades advance or drop depending on both content and style; for an A-/A-/A+, the project must demonstrate exceptional thoughtfulness, reasoning, and presentation. “A” projects involve difficult and time-consuming work – and a tremendous investment in your education and development! A solid “B” is a mark of achievement which reflects critical reasoning and/or thorough research and solid writing skills.
As per Chapter VIII of the Undergraduate Calendar:

80-100 (A) Excellent

An outstanding performance in which the student demonstrates superior grasp of the subject matter and an ability to go beyond the given material in a critical and constructive manner. The student demonstrates a high degree of creativity and/or logical thinking, a superior ability to organize, to analyse and to integrate ideas, and a thorough familiarity with the relevant literature and techniques.

70-79 (B) Good

A more than adequate performance in which the student demonstrates a thorough grasp of the subject matter, and an ability to organize and examine the material in a critical and constructive manner. The student demonstrates a good understanding of the relevant issues and a familiarity with the relevant literature and techniques.

60-69 (C) Satisfactory

An adequate performance in which the student demonstrates a generally adequate grasp of the subject matter and a moderate ability to examine the material in a critical and constructive manner. The student displays an adequate understanding of the relevant issues, and a general familiarity with the relevant literature and techniques.

50-59 (D) Poor

A barely adequate performance in which the student demonstrates a familiarity with the subject matter, but whose attempts to examine the material in a critical and constructive manner are only partially successful. The student displays some understanding of the relevant issues, and some familiarity with the relevant literature and techniques.

0-49 (F) Fail

An inadequate performance.
APPENDIX X

A project proposal that involves research with human participants must conform to the Office of Research’s ethical standards, policies and procedures:
http://www.uoguelph.ca/research/forms_policies_procedures/human_participants.shtml

Students are required to read about research policies involving human participants:
http://www.uoguelph.ca/research/policies/Adobe/C6_Human_Participants.pdf

Students are also required to complete Form B and submit it to the instructor with the proposal:
http://www.uoguelph.ca/research/humanParticipants/procedures/step_by_step_in_course.shtml

Office of Research, Updated: April 20, 2005
Approved by: Research Board, Senate

C.6 ETHICAL CONDUCT IN RESEARCH INVOLVING HUMANS PREAMBLE
Research involving humans as subjects is essential to advancing knowledge, understanding and human welfare. Such research is a critical aspect of the work of the University and its academic programs. University researchers are profoundly grateful to those who volunteer to participate as subjects and make research possible. Balanced against the need for research is a moral imperative to conduct human research in an ethical manner that both respects human dignity and requires that the welfare and integrity of the individual remains paramount. The rights and welfare of all who contribute to the advancement of learning by their participation as subjects are of prime importance to the University. In addition, most external agencies require an institutional ethical standards review of the proposed research as a condition of the application for research funding. Research with humans is also constrained in various ways by Canadian laws and human rights legislation. Formal responsibility for ensuring the rights and welfare of human subjects is delegated to the University Research Ethics Board which evaluates all research within a framework of Guiding Ethical Principles set out in the policy statement of the three federal granting councils (CIHR, NSERC, SSHRC), namely:

☐ Respect for Human Dignity
☐ Respect for Free and Informed Consent
☐ Respect for Vulnerable Persons
☐ Respect for Privacy and Confidentiality
☐ Respect for Justice and Inclusiveness
☐ Balancing Harms and Benefits
☐ Minimizing Harm
☐ Maximizing Benefit

(Researchers are encouraged to consult the tri-council document for an expanded discussion of these principles although they should note that this discussion does not constitute a binding interpretation of them.) The University is confident of the high personal and professional standards of ethics observed by the members of its research community. The policy described herein is designed to support and reinforce those standards, and to provide the formal mechanism for approval by the University of academic programs involving human subjects.
APPENDIX A

**Reading Journal: 40%** *(All classes from Jan. 7 to Mar. 27; Assessments of 30% on Week 6 (Feb. 13) and 10% on Week 11 (Mar. 27))*

**Content and Comprehension: /10**

0-2: Does not meet the minimum criteria for acceptable work.

3-4: Minimally acceptable. Demonstrates limited writing skills, organization and interpretation of text; did not answer questions; many grammatical and spelling errors.

4-6: Acceptable. Adequate writing skills, organization and interpretation of text; demonstrates that student has read the assigned readings; incomplete answers to questions; some grammatical and spelling errors.

7-8: More than adequate writing skills, organization and interpretation of text; demonstrates that student has read and understands the basic ideas in the assigned readings; summaries are concise and coherent; answered most questions; few grammatical and spelling errors.

9-10: Outstanding performance in which the student demonstrates superior writing skills, organization, and interpretation of text; student fully answered reflection questions with insight and/or provided additional information; few or no grammatical or spelling errors.

**Discussion Facilitation and Answers: /5**

0-1: Does not meet the minimum criteria for acceptable work.

1.5-2: Minimally acceptable. Demonstrates limited reflective and/or critical thinking skills; not engaged in facilitating group discussion.

2.5-3: Acceptable. Demonstrates some reflective and/or critical thinking skills; partially engaged in facilitating group discussion.

3.5-4: More than adequate reflective and/or critical thinking skills; demonstrates that student paid attention during class and considered the ideas presented; adequately engaged in facilitating group discussion.

4.5-5: Outstanding performance in which the student demonstrates superior reflective and/or critical thinking skills; demonstrates student is engaged with the ideas presented; fully engaged in facilitating group discussion.

**Comments:**
APPENDIX B

Participation and Professionalism: 20%
(All classes from Jan. 7 to Mar. 27; Assessments of 10% on Week 6 (Feb. 13) and 10% on Week 12 (Apr. 3))

Attendance and Participation: /25

0-5: Does not meet the minimum criteria for acceptable work; missed many seminars.
6-9: Minimally acceptable. Demonstrates limited preparation for seminars; lack of respect for seminar leader and peers; missed some seminars and did not attend make-up seminars.
10-15: Acceptable. Demonstrates some preparation for seminars; interacts with seminar leader and peers in a respectful manner; listens and responds to ideas and offers own ideas; made up any missed seminars.
16-22: More than adequate preparation and participation; demonstrates consistent and positive interactions with seminar leader and peers; openly shares insights and encourages others to reciprocate; no missed seminars or made up all missed seminars.
23-25: Outstanding performance in which the student demonstrates superior preparation and participation; demonstrates consistent and positive interactions with seminar leader and peers; consistently engages with others by respectfully offering and critiquing ideas; no missed seminars or made up any missed seminars.

Comments:
APPENDIX C

Project Process Proposal: Approved or Not Approved: 5%

Proposed Purpose of Team:  /10
The team title is clearly stated (e.g., Agents of the Anthology (How to Self-Publish on Amazon), Organizers of Content (Title Page, Table of Contents, Structure of Content), Editors of Content (Proofreading and Editing), Promoters of the Anthology (Promotion, Finances and Revenue Allocation)) and a concise description of its purpose and goals are provided. All team members’ names and signatures are included along with a concise breakdown of the proposed work distribution and deadlines for achieving team goals.

0-2: Not acceptable.
3-4: Minimally acceptable.
5-6: Acceptable.
7-8: More than adequate.
9-10: Outstanding.

Process Search and References: /10
The team has completed a preliminary search of what it will require to complete its stated goals and has provided references used to determine the above information. Suggested sources of assistance are also listed.

0-2: References are not acceptable.
3-4: Minimally acceptable.
5-6: Acceptable.
7-8: More than adequate.
9-10: Outstanding.

Comments:
APPENDIX D

Project Content Proposal: Approved or Not Approved: 5%

Proposed Content for Individual/Team: /10
The individual/team contribution to the content of the project and how it answer’s Wilson’s question is clearly stated (e.g., student will write a reflection on how his/her experiences in the BAS program have demonstrated consilience in education; team will create, act out, and record a dramatic dialogue on a current issue relevant to human welfare that involves consilience; etc…); a concise description of its purpose and goals are also provided. Each individual’s name and signature is included along with a concise breakdown of the proposed work distribution and deadlines for achieving team goals.

0-2: Not acceptable.
3-4: Minimally acceptable.
5-6: Acceptable.
7-8: More than adequate.
9-10: Outstanding.

Proposed Content Resources/References: /10
The individual/team has completed a preliminary search of what it will require to complete the above stated goals and has provided references used to determine the above information. Suggested sources of assistance are also listed.

0-2: References are not acceptable.
3-4: Minimally acceptable.
5-6: Acceptable.
7-8: More than adequate.
9-10: Outstanding.

Comments:
APPENDIX E

SAMPLE/SUGGESTED MARKING RUBRIC FOR INDIVIDUAL/TEAM PROJECT PROCESS AND CONTENT PORTIONS OF CLASS PROJECT: 15%

Content and Comprehension:  /10
0-2: Does not meet the minimum criteria for acceptable work. Topic not acceptable
3-4: Minimally acceptable. Demonstrates limited critical thinking skills, organization, interpretation of primary/secondary sources; illogical flow of ideas; only one perspective covered; only one discipline addressed; unclear or incomplete reasoning for topic choice.
5-6: Acceptable. Adequate critical thinking skills, organization, interpretation of primary and/or secondary sources, and logical flow of ideas; at least two perspectives covered; only one discipline addressed; demonstrates some principles learned throughout the course; cursory reasoning for topic choice.
7-8: More than adequate critical thinking skills, organization, interpretation of primary and/or secondary sources, and logical flow of ideas; at least three perspectives covered; at least two disciplines addressed; demonstrated application of content and critical thinking principles to group work; uses evidence to support ideas as taught during seminars and according to Wilson (1998); reasoning for topic choice is clear and relevant.
9-10: Outstanding performance in which the group demonstrates superior critical thinking skills, organization, interpretation of primary and/or secondary sources, and logical flow of ideas; three or more perspectives covered; two or more disciplines addressed; group uses evidence to support arguments as taught during seminars and according to Wilson (1998); group engages the audience with insight, critical arguments, and novel and/or unique perspective; the importance and relevance of the topic are clear and compelling; topic is meaningful and challenging.

Approach to Project Topic:  /10
0-2: Does not meet the minimum criteria for acceptable work. Topic is unacceptable.
3-4: Minimally acceptable. Demonstrates limited creativity and risk in approach and presentation; topic and presentation format do not complement each other; choice of topic too simplistic or obvious; no latitude for real discussion or debate; unprepared to present; unable to answer questions.
5-6: Acceptable. Demonstrates some creativity and risk in approach and presentation; topic and presentation format are congruent; choice of topic cursory but provides some opportunity for discussion and debate; prepared to present; minimal answers to questions.
7-8: More than adequate creativity and risk in approach and presentation; topic and presentation format complement each other; choice of topic is meaningful and relevant; well prepared to present; well informed answers to questions.
9-10: Outstanding performance in which the group demonstrates superior creativity and risk in approach and presentation; topic and presentation format enhance each other; choice of topic is very significant compels the audience to re-evaluate their prior knowledge of the topic; more than well prepared to present; well informed and insightful answers to questions; thoroughly engages audience in topic and various perspectives; group takes a risk focusing on controversial and/or less well known information/positions.
*Peer Evaluation:  /5*

0-1: Does not meet the minimum criteria for acceptable work; failed to contribute to project.

1.5-2: Minimally acceptable. Demonstrates limited preparation for group work on project; lack of cooperation and collaboration with group members; missed some group meetings and did not make-up missed work.

2.5-3: Acceptable. Demonstrates some preparation for group work; interacts with group members in a cooperative, supportive, and collaborative manner; listens and responds to ideas and offers own ideas; made up any missed work.

3.5-4: More than adequate preparation and participation in group activities for project; demonstrates consistent and positive interactions with group members that draw out peer strengths and support peer areas of learning (e.g., theatre student may share drama experience with non-theatre students for a re-enactment, whereas physics student may share principles of a simple experiment for a demonstration); openly shares insights and encourages others to reciprocate; equitable contributions to group work.

4.5-5: Outstanding performance in which the student demonstrates superior preparation and participation; demonstrates consistent and positive interactions with group members that both supports and challenges peers to work outside of their own zone of comfort in ways that lead to success (e.g., practicing public speaking with a shyer peer; sharing technical skills in multimedia with peers rather than just working alone; demonstrating trust and respect in ways that encourages peers to share radically different ideas without fear of ridicule; etc...); consistently engages with others by respectfully offering and critiquing ideas; equitable contributions to group work.

*On the day of your group’s presentation, each group member is to provide a peer evaluation mark (out of 5) for each member, including yourself, on this sheet. All of the marks assigned to each individual – including your self-evaluation mark - will be averaged for a final mark (out of 5).*

Your name: ___________________________________________;  Your mark: /5

Peer 1 name: ___________________________________________; Peer 1 mark: /5

Peer 2 name: ___________________________________________; Peer 2 mark: /5

Peer 3 name: ___________________________________________; Peer 3 mark: /5

Peer 4 name: ___________________________________________; Peer 4 mark: /5

Comments: