

# Global Engagement Seminar Program

## ARTS 490

### Socio-Cultural and Political Implications of Artificial Intelligence

Professors Marcel O’Gorman and Ian Milligan

Winter 2019

6:30pm - 9:20pm

Balsillie School for International Affairs, Room 1-42



[\(https://xkcd.com/1838/\)](https://xkcd.com/1838/)

## Contact Information

### Course Instructors

#### Ian Milligan

Associate Professor, History

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Office: HH 114

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#### Marcel O’Gorman

University Research Chair, English

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Office Hours: TBA

## Jarislowsky Fellows in Global Engagement

**David Jones** is an Executive Producer and Principal Program Manager on Microsoft's Envisioning Team. He explores how new technologies will impact the way we live and work in 5-10 years and brings ideas to life through experiential prototypes and video.

**Mimi Onuoha** is a Nigerian-American, Brooklyn-based media artist and researcher. Her work uses code, writing, interventions, and objects to explore missing data, AI-based technologies and the ways in which people are abstracted, represented, and classified.

## Program Administrator

### **Dani Marcheva**

Office: 3-37 Balsillie School for International Affairs

Hours: 8:30 am - 2:30 pm on Mondays & Tuesdays; 2:00 pm - 7:00 pm on Thursdays.

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As the GES's Program Coordinator, she is responsible for providing administrative support to the program. She will be publicising some of our events and activities over social media and the website (so feel free to share articles and events that are of interest with her). She will also be attending some of our classes and will act as the key point of contact for organising our Global Engagement Summit in April.

## Course Description

Artificial Intelligence has impacted many aspects of daily life. We are witness to new cultural forms ranging from gaming devices to companion robots. We have seen exponential growth in the automation of jobs, from the manufacturing to the service sector, and the consequent displacement of human labour. It is clear then that the socio-cultural and political impacts of such trends deserve our attention -- as students, scholars, policy makers, and practitioners.

Seminar based discussions with experts in the field of AI will provide students with the opportunity to pose serious questions about socio-cultural and political impacts, with the goal of developing informed responses to such technologies, including the role of corporate ownership, embedded biases of algorithms, privacy concerns, etc.

## Course Objectives

After completing this course, students will have developed the following: skills essential to the critical analysis and understanding of the socio-political implications of artificial intelligence; improved research and writing skills; collaborative skills necessary for teamwork; exemplary public presentation and conversation facilitation skills.

## Course Texts and Films

Students are not required to purchase any course materials. All of the assigned course readings have been selected from a range of academic and non-academic sources which will be made available to students through LEARN. These articles are accessible from campus as well as when connecting from home.

## Course Requirements, Expectations, and Standards

All assignments for this course are graded on a pass/fail basis. Students may work on their final projects as a team or on an individual basis. A student who does not engage meaningfully in class discussions, project updates, roundtable discussions, summit rehearsals and organizational meetings is not likely to pass this course. In order to satisfactorily complete the class, students are expected to attend and to actively participate in the seminar discussions and activities, submit short reflection papers on a regular basis, and actively contribute to the summit's organization and event. A student who does not participate in the final summit will not pass this course.

As a class (and with the Fellows often present for the first part or so of the class), we will:

- discuss the readings;
- compile new lists of relevant readings, films and other resources and post them on LEARN so that they may be placed on our website;
- write reflection papers; and
- share our project ideas and proposals with classmates.

## Attendance and Participation

In order to satisfactorily complete the class, you will attend and participate in all classes. Except in exceptional circumstances (for example, serious illness), students who miss more than two classes in the term will not pass the course. The course has an intensive time commitment. Additional time will be expected of students to pursue the appropriate training and gain access to resources in order to develop their final projects.

## Assignments

Grading Overview in a Nutshell

*Everything is graded as pass/fail. We provide the breakdown here.*

Assignment	Due Date	Percentage
PART ONE: Understanding the Socio-Cultural Implications of AI		

Discussion Primers	Weeks 2-6 (17 January - 14 February)	5 x 2% = 10%
Reflection Papers	Twice, the Wednesday following the class on which you are reflecting	2 x 10% = 20%
PART TWO: Preparing for and Delivering the Summit		
Project Idea (formal presentation)	February 14	5%
Project Proposal (written)	February 28	15%
Summit Iteration 1	March 14	10%
Summit Iteration 2	March 28	10%
Summit Participation and Presentation	April 3 and 4	30%

#### Discussion Primers (Week 2-6)

**These will be written and submitted in class.** At the beginning of each of these five classes, you will be asked to write a short reflection in class on the readings, videos, or other assigned content. These short free-writing exercises will serve as a **primer** for the discussions that will follow. In each primer, we will expect a discussion of the key themes covered in the week's content. While they are done in class, if you do miss a class, you are welcome to submit this by e-mail.

#### Short Reflection Papers (Due Twice during Week 2-6)

You will need to carefully prepare and submit at least **two reflection papers** before Friday, February 15th. Papers should be between 500 and 750 words and uploaded to LEARN by the following Wednesday at 11:59pm EST, following the class that you are writing about (for example, if you decide to respond to the class in Week Two, the paper is due the following Wednesday right before our Week Three meeting).

Each paper will **reflect on one of the themes as discussed in the class**. It should make reference to, at a minimum:

- One of the class readings or videos;
- One popular cultural artefact (a film, episode of *Black Mirror*, etc.)
- One text that is not on the syllabus (an academic article, article from the *New Yorker*, etc.)

You can write your papers on any of the discussion topics between Week 2 and 6. **The only rule is that you should write one responding to one of David's weeks and another responding to one of Mimi's weeks.**

### Presentation of Your Project Idea (14 February)

Prepare and present to the class their project idea for a community project, scholarly paper, object-to-think-with, cultural production, report, policy brief, film script, etc. You will choose your own topic and the form that you would like the final project to take. You may work individually or with a group.

The more interested you are in the topic you choose, the more committed you will be to conducting careful research. Each student or team will have four minutes to provide an overview of the core issue you have selected to examine or explore and the project that you have chosen to work on.

An excellent presentation is one that communicates your interests clearly and concisely. Remember to open your presentation with a title. Be sure to discuss the most important issues and questions you have worked through in the course of your research and production to date. Be sure to discuss how your proposal directly reflects on the course themes.

Each presentation should make sure to have the following components:

- Title
- Description of project and relationship to course themes and readings
- Other related projects or works that have looked at this topic before
- Why you have chosen the project
- Tentative idea for completing the project idea

### Formal Written Project Proposal (28 February)

After getting feedback on your project idea, you will then submit a formal project proposal. This should be about 1,250 - 1,500 words long. It should contain the following:

- Project title;
- Description of project and relationship to the course readings and theme of socio-cultural implications of artificial intelligence (1000 words);
- Related work that may have been done on this topic before – i.e. What have other people done in this area (250 - 500 words);
- A timeline for the completion of each task. If this is a group project, the proposal should assign tasks to individuals.
- A bibliography of sources and a list of resources. The proposal must reference at least three authoritative texts.

### Summit Iteration 1 (14 March)

This will be a progress report on your project. The class will consist of “studio time,” where each group will have time to work productively while the course professors meet with each group individually to discuss progress.

By this time, we expect that groups will have done the following and will be able to present on them:

- Provide proof of the feasibility of your project, with a list of materials needed (if any).
- Assign tasks to individual group members.
- Provide a timeline of tasks to be completed.

### Summit Iteration 2 (28 March)

By this point, the project should be complete, and ready for feedback and revision. We will gather in the classroom for “rehearsals” in preparation for the summit. We may invite some outside guests (faculty, grad students, or other community members) to participate and comment on projects. Students are expected to integrate feedback into their final projects.

### Summit Itself (3-4 April)

Much of the course is building towards the Global Engagement Summit, a student-driven event that caps off the term. The two fellows will be in attendance. We will all be involved in its organization throughout the term. This will be a one- and a half-day event that will be held on campus, open to the public.

**The summit will involve two deliverables from each project team: an oral presentation as well as a physical object that can be displayed to attendees at a reception.**

Great fun and engagement will be had by all!

## Class Schedule

Date	Class Topic	Readings
Week 1: January 10	Course Introduction	
Week 2: January 17	David Jones: “The Changing World of Work”	Watch the eight short videos at <a href="https://news.microsoft.com/envisioning/">https://news.microsoft.com/envisioning/</a> .  Tad Friend, “How Frightened Should We Be of A.I.?” <a href="#">Here</a> .
Week 3: January 24	David Jones: “An Overview of Artificial Intelligence.”	Tim Urban, “The AI Revolution.” <a href="#">Part One</a> and <a href="#">Part Two</a> .  Melanie Mitchell, “Artificial Intelligence Hits the Barrier of Meaning.” <a href="#">Here</a> .
Week 4: January 31	Mimi Onuoha: “A People’s Guide to AI”	<a href="#">Read the Guide Here</a> .

Week 4A: February 1st	<p>Special Field Trip to Communitech at 1pm</p> <p><i>This is an optional event that introduces you to real-world responses to ethical issues raised in the local tech community.</i></p>	Tech for Good Declaration. <a href="#">Available here.</a>
Week 5: February 7	Mimi Onuoha: “What is Missing is Still There: ON Data Collection, Missing Data, and the Question of Who Counts.”	Safiya Noble, “A Society, Searching,” from <i>Algorithms of Oppression: How Search Engines Reinforce Racism</i> (New York: NYU Press, 2018). Available from course reserves.
Week 6: February 14	<p>Mimi Onuoha: Classified and Categorized: The Origins of Social Algorithms</p> <p><i>Project Proposal Presentations</i></p>	Cathy O’Neill, “What is a Model?” from <i>Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy</i> (New York: Penguin/Random House, 2016). Available from course reserves.
READING WEEK		
Week 7: February 28	<p>David Jones: “Hot Issues in AI.”</p> <p><i>Project Proposals Due</i></p>	Readings will be provided by February 14th.
Week 8: March 7	<b>Skills Workshop</b>	Readings TBA.
Week 9: March 14	<p>Summit Prep Day</p> <p>Groups will be working in the classroom and working with the professors on summit iteration #1.</p>	No readings, working on summit.
Week 10: March 21	<p>Summit Prep Day - No Formal Activities Planned</p> <p><i>Class will not formally meet but you can use the classroom.</i></p>	No readings, working on summit.
Week 11: March 28	Summit Presentations/Briefs/Code Demonstrations/etc.	No readings, working on summit.
Week 12: April 3/4	Global Engagement Summit	

## Course Policies

**Late Assignments:** Students are expected to respect all deadlines on the syllabus. In order to be fair to your classmates, there is a late assignment penalty of 5% per day.

**Academic Integrity:** In order to maintain a culture of academic integrity, members of the University of Waterloo are expected to promote honesty, trust, fairness, respect and responsibility. See the [UWaterloo Academic Integrity webpage](#) and the [Arts Academic Integrity webpage](#) for more information.

**Discipline:** A student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about “rules” for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to [Policy 71 - Student Discipline](#). For typical penalties check [Guidelines for the Assessment of Penalties](#).

**Grievance:** A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read [Policy 70 - Student Petitions and Grievances](#), Section 4. When in doubt, please be certain to contact the department’s administrative assistant who will provide further assistance.

**Appeals:** A decision made or penalty imposed under Policy 70 - Student Petitions and Grievances (other than a petition) or Policy 71 - Student Discipline may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to [Policy 72 - Student Appeals](#).

Accommodation for Students with Disabilities

**Note for students with disabilities:** The [AccessAbility Services](#) office, located on the first floor of the Needles Hall extension (1401), collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the AS office at the beginning of each academic term.

### Mental Health Support

All of us need a support system. The faculty and staff in Arts encourage students to seek out mental health supports if they are needed.

### On Campus

- Counselling Services: [counselling.services@uwaterloo.ca](mailto:counselling.services@uwaterloo.ca) / 519-888-4567 xt 32655
- [MATES](#): one-to-one peer support program offered by Federation of Students (FEDS) and Counselling Services
- Health Services Emergency service: located across the creek from Student Life Centre

### Off campus, 24/7

- [Good2Talk](#): Free confidential help line for post-secondary students. Phone: 1-866-925-5454
- Grand River Hospital: Emergency care for mental health crisis. Phone: 519-749-433 ext. 6880

- [Here 24/7](#): Mental Health and Crisis Service Team. Phone: 1-844-437-3247
- [OK2BME](#): set of support services for lesbian, gay, bisexual, transgender or questioning teens in Waterloo. Phone: 519-884-0000 extension 213

Full details can be found online at the Faculty of ARTS [website](#)

Download [UWaterloo and regional mental health resources \(PDF\)](#)

Download the [WatSafe app](#) to your phone to quickly access mental health support information