DALHOUSIE UNIVERSITY

Dalhousie University is located in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq. We are all treaty people

The following information is for quick reference; the full syllabus can be found below.

ASSC 1801 (03) – *Case Studies in Computing & Society*, Dalhousie University, Winter 2024

Course Info. (More details provided in Section 1, Pages 2-3)

Delivery: In person, except if otherwise noted.
Room: LSC Psychology, Room P5260 **Time (Sec. 01)**: MW 11:35 - 12:25 Atlantic
Contact: Dr. Travis LaCroix, tl@dal.ca, McCain 3180 **Office Hours** by appointment
Textbooks: Lecture slides, readings, & additional resources available on Brightspace.

Important Dates.

08 Jan 2023 Classes begin – Winter term
02 Feb 2023 Munro Day – *University Closed*
06 Feb 2023 Last day to drop without a 'W'
19 Feb 2023 NS Heritage Day – *Uni Closed*
19 Feb 2023 Winter break begins
23 Feb 2023 Winter break ends
06 Mar 2023 Last day to drop with a 'W'
29 Mar 2023 Good Friday - *University Closed*
08 Apr 2022 Friday classes held
09 Apr 2022 Friday classes held, end of term

Schedule of Topics. (More details provided in Section 2, Pages 4-8)

Week 01	January 08, 10	Introduction to the Course
Week 02	January 15, 17	Superintelligence and Control
Week 03	January 22, 24	History of Artificial Intelligence
Week 04	January 29, 31	Artificial Intelligence Today
Week 05	February 05, 07	Review, Catch Up
Week 06	February 12, 14	The Value Alignment Problem
Week 07	February 19, 21	*Winter Break — No Class (University Open)*
Week 08	February 26, 28	AI Safety
Week 09	March 04, 06	Machine Ethics
Week 10	March 11, 13	Axes of Value Alignment I: Objectives
Week 11	March 18, 20	Axes of Value Alignment II: Information
Week 12	March 25, 27	Axes of Value Alignment III: Principals
Week 13	April 01, 03	Deep Learning and Ethics
Week 14	April 08, 10	*Friday Classes Held* (No ASSC 1801 Meeting)
Week 15	April 15, 17	Exam Period (*No Class*)
Week 16	April 22	Exam Period (*No Class*)

Grade Breakdown. (More details provided in Section 3, Pages 8-10)

Weight	**Description**	**Deadline**
0%	Plagiarism Quiz	January 24
20%	Attendance & Participation (Tutorial)	*Weekly*
20%	Lecture Quizzes (Best 10 of 12)	*Weekly* (Fridays)
60%	Writing Assignments (4x, worth 15-20% each)	February 09, March 01, March 22, April 09
2%	Course Evaluation Game (Bonus)	April 10, SLEQ Close Date
1%	Manuscript Errors (Bonus)	April 10

Complete Course Policies and **University Statements** provided in Sections 4, 5, & 6 Pages 10-15.

DALHOUSIE UNIVERSITY

Dalhousie University
Faculty of Arts and Social Science
ASSC 1801 – Case Studies in Computing and Society
Topic: *Artificial Intelligence and the Value Alignment Problem*
Winter 2024, 3 Credit Hours, Lecture + Tutorial

1. COURSE INFORMATION

1.1. Territorial Acknowledgement. Dalhousie University is located in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq. We are all treaty people.

1.2. Instructor Information.

Instructor	Dr Travis LaCroix
Pronunciation	// TRA-viss LA-kwah //
Office	Marion McCain, Room 3180
Office Hours	By appointment, https://calendly.com/tlacroix
Email	tlacroix@dal.ca

1.3. Course Times + Location.

Time	MW 11:35 – 12:25 Atlantic
Delivery	In-Person, except if otherwise noted
Location	Studley Campus, LSC Psychology, Room P5260

1.4. Tutorial Times + TA Info.
(Check the academic timetable to ensure correct dates, times, and locations)

Sec.	Day	Time	Location	TA	Contact
T02	M	16:35 - 17:25	McCain Arts & SS 2132	Catherine Frawley	catherine.frawley@dal.ca
T05	M	15:35 - 16:25	McCain Arts & SS 1116	Catherine Frawley	catherine.frawley@dal.ca
T09	M	15:35 - 16:25	McCain Arts & SS 2116	Nicole Leroy	nicole.leroy@dal.ca
T10	M	13:35 - 14:25	McCain Arts & SS 2017	Michelle Lee	michellelee@dal.ca
T11	M	12:35 - 13:24	LSC Common Area C334	Michelle Lee	michellelee@dal.ca

1.5. Important Dates. Listed below are some important dates, relevant to this course. A complete list of important dates for the academic year can be found online at https://www.dal.ca/academics/important_dates.html.

01 Jan 2023	University closed	**06 Mar 2023**	Last day to drop, 'W' notation
08 Jan 2023	Classes begin – Winter term	**29 Mar 2023**	Good Friday – *University Closed*
02 Feb 2023	Munro Day – *University Closed*	**08 Apr 2023**	Friday Classes Held
06 Feb 2023	Last day to drop, no 'W' notation	**09 Apr 2023**	Friday Classes Held, *Term Ends*
19 Feb 2023	Heritage Day – *University closed*	**10 Apr 2023**	Break before exams
19 Feb 2023	Winter break begins	**11 Apr 2023**	Exam period begins
23 Feb 2023	Winter break ends	**23 Apr 2023**	Exam period ends

1.6. Calendar Course Description. This course introduces students to specific topics in the history of computing. Topics may include algorithms, automation, or information. Students will learn to read, write, and discuss scholarly arguments about how computing has shaped society, and how society has shaped computing, over time.

1.7. Minimal Technical Requirements. This course will utilise D2L's Brightspace Learning Management System for readings, announcements, assignment submission, additional discussion, etc. If using a **PC (Windows)** or a **Mac (Mac OS),** Dalhousie recommends that you use **Firefox** to access Brightspace since some other browsers (Internet Explorer, Edge, Safari), may not fully support the

software. Brightspace can be accessed at https://dal.brightspace.com. You will also need a Microsoft Teams account to attend office hours if you choose to book an appointment.

1.8. Prerequisites. None.

1.9. Exclusions. HSTC 1801.03, HSTC 1200.06, HIST 2074.06, HSTC 2200.06, SCIE 2000.06

1.10. Restrictions
Level: Undergraduate
Major: Applied Computer Science, Computer Science

1.11. Course Rationale. The recent successes of machine learning and deep learning methods in artificial intelligence have led to AI systems being deployed with little consideration for the consequences or impacts they may have on society. Because the "goals" of AI systems in this context are often implicit, rather than hard-coded, value alignment problems turn out to encompass many of the social issues—including bias, transparency, fairness, etc.—that arise in the context of interactions between AI and society. This provides a relevant and timely "case study" for examining computers and society.

1.12. Course Learning Outcomes. By the end of this course, students will be equipped to:

- Support written and verbal arguments with evidence and to critically analyse and assess arguments.
- Understand and contextualise contemporary problems surrounding value aligned artificial intelligence (with respect to both conceptualisation and implementation).
- Identify and articulate questions for discussion and investigation.
- Critically digest, interpret, and analyze complex, multi-disciplinary sources.
- Write a convincing argument that takes adequate account of alternative positions.
- Engage in constructive, respectful, oral, and written discussion.
- Use feedback about one's work to improve one's arguments and writings.

1.13. Required Texts. Except if otherwise noted, all of the required readings for this course will be made available online through the Learning Management System, https://dal.brightspace.com/. Details about the readings are given in the course schedule below.

1.14. Detailed Course Description. Artificial intelligence research is progressing quickly, and along with it the capacities of AI systems. As these systems become more sophisticated and more deeply embedded in society, it will become increasingly essential to ensure that we are able to maintain control of these systems, and that the decisions and actions they take are aligned with the values of humanity writ large. These are known, in the field of machine ethics, as the *control problem* and the *value alignment problem*.

In the first part of this course, we will examine the concepts of control and value alignment to see how they are connected and what practical, scientific, ethical, and philosophical questions arise when trying to solve these problems. We will focus on both the normative and technical components of value-aligned artificial intelligence—namely, how to achieve moral agency in an artificial system. The normative component of the value alignment problem asks what values or principles (if any) we ought to encode in an artificial system; whereas, the technical component asks how we can encode these values. In the final part of the course, we will examine the social, ethical, and philosophical consequences that might arise (indeed, have arisen) from misaligned AI systems.

DALHOUSIE UNIVERSITY

2. COURSE SCHEDULE

2.1. Summary of Topics.

Week 01	January 08, 10	Introduction to the Course
Week 02	January 15, 17	Superintelligence and the Control Problem
Week 03	January 22, 24	History of Artificial Intelligence
Week 04	January 29, 31	Artificial Intelligence Today
Week 05	February 05, 07	Review, Catch-Up
Week 06	February 12, 14	The Value Alignment Problem
Week 07	February 20, 22	***Winter Break*** (*No Class*)
Week 08	February 26, 28	AI Safety
Week 09	March 04, 06	Machine Ethics
Week 10	March 11, 13	Axes of Value Alignment I: Objectives
Week 11	March 18, 20	Axes of Value Alignment II: Information
Week 12	March 25, 27	Axes of Value Alignment III: Principals
Week 13	April 01, 03	Deep Learning and Ethics
Week 14	April 08, 10	Friday Classes held; No scheduled meeting for ASSC 1801
Week 15	April 15, 17	Exam Period (*No Class*)
Week 16	April 22	Exam Period (*No Class*)

2.2. Detailed Course Schedule. Except where otherwise noted, all of the required readings for this course will be made available online through the course webpage, https://dal.brightspace.com/. Required readings for a given week should be completed *before* the meeting for that week.

Week 1	**Introduction to the Course**			
Date	**Readings**	**Lecture**	**Tutorial**	**Notes**
Monday 08 Jan. Wednesday 10 Jan.	**Required** • Syllabus **Optional** • *AI & VAP* – Introduction	**Lecture 1**: *Introduction to the Course*	• *No tutorials this week* • Complete "Introductions" on Brighspace discussion forum	**Quiz 1 –** Syllabus *Due Jan. 12, by 23:59 Atlantic* (Brightspace)
Week 2	**Superintelligence and the Control Problem**			
Monday 15 Jan. Wednesday 17 Jan.	**Required** • *AI & VAP* – Ch. 1 **Optional** • *N/A*	**Lecture 2**: *Superintelligence* **Lecture 3**: *The Control Problem*	• Introductions + Ground Rules	**Quiz 2 –** Superintelligence and Control *Due Jan. 19 by 23:59 Atlantic* (Brightspace)

Week 3	A Brief History of Artificial Intelligence			
Date	**Readings**	**Lecture**	**Tutorial**	**Notes**
Monday 22 Jan. Wednesday 24 Jan.	**Required** • *AI & VAP* – Ch. 2 **Optional** • *N/A*	**Lecture 4**: *Pre-History and Beginning of AI* **Lecture 5**: *First- and Second-Wave AI*	• Organising Groups	**Quiz 3** – History of AI *Due Jan. 26 by 23:59 Atlantic* (Brightspace) **Assignment 1** available, January 24 (Brightspace)
Week 4	**Artificial Intelligence Today**			
Monday 29 Jan. Wednesday 31 Jan.	**Required** • *AI & VAP* – Ch. 3 **Optional** • *N/A*	**Lecture 6**: *Artificial Intelligence Today* **Lecture 7**: *Deep Learning*	• Assignment 1 Instructions	**Quiz 4** – AI Today *Due Feb. 02 by 23:59 Atlantic* (Brightspace)
Week 5	**Review + Catch-Up**			
Monday 05 Feb. Wednesday 07 Feb.	**Required** • None **Optional** • Review *AI & VAP*, Chapters 1, 2, and 3	**No Meeting** (Lecture) Tutorials are still scheduled	• Assignment 1 Drafts	**Quiz 5** – Basic Concepts (Review) **Submit Assignment 1** *Due Feb. 09 by 23:59 Atlantic* (Brightspace)
Week 6	**The Value Alignment Problem**			
Monday 12 Feb. Wednesday 14 Feb.	**Required** • *AI & VAP* – Ch. 4 **Optional** • *N/A*	**Lecture 8**: *Value Alignment and the Principal Agent Problem* **Lecture 9**: *The Value Alignment Problem (Definition)*	• Assignment 2 Instructions • Re-organising Groups	**Quiz 6** – Value Alignment *Due Feb. 16 by 23:59 Atlantic* (Brightspace) **Assignment 2** available, Feb. 14 (Brightspace)

Week 7	**Winter Study Break**			
M,W 19, 21 Feb.	*No Class (University Open)*			
Week 8	**AI Safety**			
Date	**Readings**	**Lecture**	**Tutorial**	**Notes**
Monday 26 Feb. Wednesday 28 Feb.	**Required** • *AI & VAP* – Ch. 5 **Optional** • Amodei et al. (2016)	**Lecture 10** *AI Safety* **Lecture 11** *Technical Approaches*	• Assignment 2 Drafts	**Quiz 7** – AI Safety **Submit Assignment 2** *Due Mar. 01 by 23:59 Atlantic* (Brightspace)
Week 9	**Machine Ethics**			
Monday 04 Mar. Wednesday 05 Mar.	**Required** • *AI & VAP* – Ch. 6 **Optional** • Van Wynsberghe and Robbins (2019)	**Lecture 12** *Machine Ethics* **Lecture 13** *Artificial Moral Agency*	• Assignment 3 Instructions • Re-organising Groups	**Quiz 8** – Machine Ethics *Due Mar. 08 by 23:59 Atlantic* (Brightspace) **Assignment 3** available, Mar. 06 (Brightspace)
Week 10	**Axes of Alignment I: Objectives**			
Monday 11 Mar. Wednesday 13 Mar	**Required** • *AI & VAP* – Ch. 7 **Optional** • *AI & VAP* – Ch. 10 • Johnson (2021)	**Lecture 14** *Proxies* **Lecture 15** *Bias and Fairness*	• Assignment 3	**Quiz 9** – Objectives *Due Mar. 15 by 23:59 Atlantic* (Brightspace)
Week 11	**Axes of Alignment 2: Information**			
Monday 18 Mar. Wednesday 20 Mar.	**Required** • *AI & VAP* – Ch. 8 **Optional** • *AI & VAP* – Ch. 11 • Creel (2020)	**Lecture 16** *Transparency and Opacity* **Lecture 17** *Data and Datasets*	• Assignment 3 Drafts	**Quiz 10** – Information **Submit Assignment 3** *Due Mar. 22 by 23:59 Atlantic*

Week 12	**Axes of Alignment III: Principals**			
Date	**Readings**	**Lecture**	**Tutorial**	**Notes**
Monday 25 Mar. Wednesday 27 Mar.	**Required** • *AI & VAP* – Ch. 9 **Optional** • *AI & VAP* – Ch. 12 • Green (2019) • Thomas and Uminsky (2022)	**Lecture 18** *Principals* **Lecture 19** *Values and Value-Ladenness*	• Assignment 4 Instructions • Re-organising Groups	**Quiz 11** – Principals *Due Mar. 28 by 23:59 Atlantic* (Brightspace) **Assignment 4** available, March 24 (Brightspace)
Week 13	**Deep Learning and Ethics**			
Monday 01 Apr. Wednesday 03 Apr.	**Required** • LaCroix and Prince. 2023. "Deep Learning and Ethics"	**Lecture 20** *Deep Learning and Ethics* (Time permitting)	• Assignment 4 Drafts	**Quiz 12** – Deep Learning and Ethics *Due Apr. 05 by 23:59 Atlantic* (Brightspace)
Week 14	**In-Lieu Day**			
Monday 08 Apr.	*None* (Friday Classes Meet)			**Submit Assignment 4** *Due Apr. 09 by 23:59 Atlantic* (Brightspace) **SLEQ** – *Due Apr. 10 by 23:59 Atlantic* (Online)
Week 15	**Exam Period (*No Class*)**			
M, W 15, 17 Apr.	*None*			
Week 16	**Exam Period (*No Class*)**			
Monday 22 Apr.	*None*			

2.3. Complete List of Readings. The following readings will be made available to you on the course webpage. The bibliographic information listed below can (and should) be used for submitted assignments, where relevant.

Required

Travis LaCroix. 2024. *Artificial Intelligence and the Value Alignment Problem*. Book MS, forthcoming: Broadview Press.

Travis LaCroix and Simon J. D. Prince. 2023. "Deep Learning and Ethics" Chapter 21 in Simon J. D. Prince. *Understanding Deep Learning*. Cambridge, MA: The MIT Press. 420-435.

Optional

Dario Amodei, Chris Olah, Jacob Steinhardt, Paul Christiano, John Schulman, and Dan Mané. 2016. "Concrete Problems in AI Safety" *arXiv Pre-Print*. 1606.06565: 1-29.

Aimee Van Wynsberghe and Scott Robbins. 2019. "Critiquing the Reasons for Making Artificial Moral Agents" *Science and Engineering Ethics* 25(3): 719-735.

Gabbrielle M. Johnson. 2021. "Algorithmic Bias: On the Implicit Biases of Social Technology" *Synthese*. 198: 9941-9961.

Kathleen Creel. 2020. "Transparency in Complex Computational Systems" *Philosophy of Science*. 87(4): 568-589.

Ben Green. 2019. "'Good' Isn't Good Enough" *NeurIPS Workshop on AI for Social Good*.

Rachel L. Thomas, and David Uminsky. 2022. "Reliance on Metrics is a Fundamental Challenge for AI" *Patterns* 3(5): 1-8.

3. GRADING

3.1. Grading Scheme. The breakdown for the final grade and submission details is given as follows (further details on each component is given below in Section 3.2).

Points	Description	Deadline
0	Plagiarism Quiz	Wednesday, January 24 *Submitted online via Brightspace*
20	Lecture Quizzes, (10 x 2 points each, best 10 out of 12)	Fridays by 23:59 Atlantic (Weeks 1, 2, 3, 4, 5, 6, 8, 9, 10, 11 12, 13) *Submitted online via Brightspace*
20	Attendance and Participation (Tutorial Sections, best 10 out of 12)	*Ongoing, Weekly*
60	Writing Assignments (4x, worth 20 points each, best 3 of 4)	**Assignment 1**: February 09 **Assignment 2**: March 01 **Assignment 3**: March 22 **Assignment 4**: April 09
2	Course Evaluation Game (Bonus)	Wednesday, Apr. 10 by 23:59 Atlantic (SLEQ close date, *Submitted online*)
1	Errata (Bonus)	By April 10 (Discussion Forum)

3.2. Assignment Details. Where relevant, assignments should be submitted via the course webpage. Instructions for assignment submission will be posted on the course webpage (https://dal.brightspace.com).

3.2.1. Plagiarism Quiz. **0 Points Total**. In order to be eligible to view and submit your writing assignment, you will be required to **complete** and **score 100%** on a short quiz on plagiarism. The quiz will not count toward your grade; however, ***you must do the quiz in order to view and submit the writing assignments***. The quiz will be available on the course webpage and may be submitted at any time prior to the Wednesday, January 24. It can be resubmitted as many times as necessary to obtain 100%. If you do not do the quiz, ***or*** you do not obtain 100% on the quiz, you will be unable to view or submit the first writing assignment. ***Submission on Brightspace***.

3.2.2. Attendance and Participation. **20 Points Total**. Your attendance will be measured by your presence and engagement in the tutorial sessions. Each week will be worth 2 points (one for attendance and one for participation). The best 10 weeks will be counted, meaning that you may incur two unexcused absences without any penalty. Week one will be graded according to participation in the "Introductions" topic on the Brightspace discussion forum.

3.2.1. Quizzes. **20 Points Total**. Each week will have a short quiz associated with it. The quizzes will typically be released on Wednesdays, by 12:30 Atlantic, and they will typically be due by the subsequent Friday at 23:59 Atlantic. **No late submissions will be accepted and there will be no extensions or make-up quizzes**. Each quiz will consist of up to 20 short questions (multiple choice, true/false, matching, short answer, etc.). There will be 12 quizzes in total. Each individual quiz will be worth 2 points. The best 10 of 12 quizzes will be counted toward the 20 points for the quiz grade (i.e., the lowest two quiz grades will be dropped from the calculation). The deadlines (typically Fridays, but for Quiz 11) and topics for the quizzes are as follows. ***Submissions on Brightspace***.

Quiz 1 – *Syllabus*	Jan. 12, 23:59 Atlantic
Quiz 2 – *Superintelligence and Control*	Jan. 19, 23:59 Atlantic
Quiz 3 – *History of Artificial Intelligence*	Jan. 26, 23:59 Atlantic
Quiz 4 – *AI Today*	Feb. 02, 23:59 Atlantic
Quiz 5 – *Basic Concepts (Review)*	Feb. 09, 23:59 Atlantic
Quiz 6 – *The Value Alignment Problem*	Feb. 16, 23:59 Atlantic
Quiz 7 – *AI Safety*	Mar. 02, 23:59 Atlantic
Quiz 8 – *Machine Ethics*	Mar. 08, 23:59 Atlantic
Quiz 9 – *Axes of Alignment I: Objectives*	Mar. 15, 23:59 Atlantic
Quiz 10 – *Axes of Alignment II: Information*	Mar. 22, 23:59 Atlantic
Quiz 11 – *Axes of Alignment III: Principals*	Mar. 28, 23:59 Atlantic
Quiz 12 – *Deep Learning and Ethics*	Apr. 05, 23:59 Atlantic

3.2.2. Writing Assignments. **4 x 20 Points Each (Best 3 of 4)**. At the end of weeks 5, 8, 11, and 14, you will submit a detailed case study and analysis which exemplifies a real-world example of the theoretical concepts discussed in class (AI hype [up to 750 words], and the three axes of value alignment [up to 1000 words each], respectively). Assignments will be completed in groups. Groups will be constituted in tutorial sections and re-constituted for each assignment. It is expected that every member of the group will contribute equally to each assignment submission. If two separate complaints are received regarding an individual's lack of contribution, then that individual will receive a grade of zero for each of those two assignments and will be required to submit an additional (fifth) solo-authored assignment in advance of the final deadline for the course. Further details will be provided on the course webpage. A detailed rubric for grading will be provided on the course webpage. ***Anonymized submissions on Brightspace***.

3.4.7. Bonus Marks. **Up to 3 Points Total**.

Course Evaluations Game. (2 marks) If a 3/4 majority of students fill out the year-end evaluation, then everyone will receive two (2) bonus marks for the course. Note that this bonus assignment has a structure typical of a prisoner's dilemma: If most students cooperate (fill out the evaluation), then it is in your individual interest to not (because you can get a bonus mark without expending additional effort in filling out the evaluation). Further, if most students defect (fail to fill out the evaluation), it is again in your best interest to defect (otherwise, you would have expended additional effort for nothing). This is a dilemma because it will always be in your own best interest to defect; however, it is in everyone's best interest to cooperate. ***Submissions online (SLEQ page)***.

Manuscript Errata. (up to 1 mark) Students can note typographical errors or points of unclarity in the required readings on the discussion forum on Brightspace. The first student to submit a unique error with receive 0.25 bonus marks. You can submit as many errors as you notice; bonus marks will be awarded for up to 4 errors.

3.3. How to Succeed in This Course. You should attend all the lectures and tutorials, submit the quizzes on time, complete the written assignments and consider the feedback that you receive from your instructors. Moreover, it has been thoroughly demonstrated that the most effective way of learning is teaching. I encourage students to engage one another in study groups and practice explaining your understandings to your classmates (and indeed to anyone who will listen). If you are having difficulty with the course content, or require clarification, you should take advantage of office hours or post questions on the discussion forum on the course webpage.

4. COURSE POLICIES

4.1. Contact Policy. Contacting the instructor (or TAs) in any course can be intimidating. So, below is a template and some tips for how to best and to do this.

First, if you have a *general* question about course content, you should post the question in the appropriate forum on the discussion board on Brightspace rather than email, since at least one other person in the course probably has the same question.

If you have a question that is unique to you and answerable in a few sentences, you should contact the instructor for this course via email (see 'Instructor Information' Sec. 1.2). **Please put the course code (ASSC 1801) and Section (01 or 03, as appropriate) in the subject-line of your email.** My policy is to respond to any enquiries within 48 hours of receipt (excluding weekends and holidays). This is important: it means you should not email the instructor the night before a deadline and expect a reply in time. If I have not responded to your email within this time frame, however, you are entitled to (and should) send a follow-up email.

1. Importantly, *before* you reach out (to the instructor or TA), you should check the syllabus and course webpage to see if you cannot easily answer the question for yourself.
2. This might seem simple, but: *be polite and considerate*. That is, in your communication, it is good to acknowledge that the person on the receiving end is a human.
3. Finally, try to be clear and concise in your emails. The clearer the question, the more effectively it can be answered. For example, 'I do not understand homework 3' is far too vague to warrant a useful response. What, specifically, do you not understand? Instead, a question like 'In problem 2 of homework 3, I am unclear if the question is asking us to find the probability of event X or the probability of event Y?' is much more likely to receive a helpful answer.
4. If you have a question about course content, it may be helpful to post it on the discussion forum on the course webpage since it is likely that at least one other person has the same question.

Here is a template, which you need not follow, but may be helpful in writing your emails:

> Dear Dr LaCroix,
>
> I hope this finds you well.
>
> I am writing to ask a question regarding [specific thing]. (I have checked the course webpage and syllabus, but I did not find the answer to this particular question.)
>
> My question is…
>
> Sincerely,
> (Your name)

Finally, if you have a question that is unique to you but would require an extensive response—e.g., feedback on an assignment—you should make an appointment to speak to me in office. (See 'Instructor Information', Sec. 1.2.)

Note that I will not respond to messages on Microsoft Teams.

4.2. Communication Blackout Period. The instructor and teaching assistants will not respond to any emails regarding assignments in the first 24 hours after the grades have been released or the assignment has been returned to students. Please wait at least 24 hours after having received your graded assignment before contacting your TA or instructor. (This time can be used to reflect on the feedback received.)

4.3. Late Submission Policy. No late submissions will be accepted on weekly quizzes. Everyone registered in the course is automatically granted a 72-hour extension on any written assignment. No notice needs to be given and no permission needs to be granted (i.e., you do not need to email me or your TA to request an extension). Submissions past this deadline will not be accepted unless alternative arrangements have been made with the instructor in advance of the deadline. No further extensions will be granted unless alternative arrangements have been made with the instructor in advance of the deadline. If you have not completed an assignment by the posted or extended deadline, you should submit what you have. If you are consistently struggling to complete the course work, you should reach out sooner rather than later, via email or an appointment in office hours.

Note that many of the policies on this syllabus are specifically designed to make Dalhousie's official accommodations redundant. If a required accommodation is not adequately satisfied, please reach out to the instructor well in advance of the relevant deadline. Dalhousie has further information on accessibility, accommodations, and general academic support here: https://www.dal.ca/campus_life/academic-support/accessibility/accommodations-/deadline-extensions-and-deferred-exams.html.

4.4. Re-Grading Policy. All inquiries into discussing, reviewing, or appealing already graded coursework must be submitted in writing within 7 days of the student's grade being posted. After 7 days, I will not entertain any requests to go over, review, or revise work that has already been graded. All grade inquiries must include a written statement with evidence and reference to the provided assignment rubric as to why the student thinks their grade should be reviewed/revised. If a grade is reviewed by the instructor, the final assessment made by the instructor is the final grade; no further appeal will be granted.

All final grades at the end of the semester will be reported as calculated. Requests for an increase to one's grade will be ignored (including borderline cases).

4.5. Ground Rules for Discussion. The following ground rules form a set of expected behaviours for conduct in discussions and lectures. They are meant to foster an intellectual atmosphere where we work together to achieve knowledge. They are also meant to ensure that discussions are spirited without devolving into argumentation and to ensure that everyone has an opportunity to be heard.

DO:

- Respect yourself and others (share your viewpoint and allow others to share theirs).
- Show respect for others by learning and using their preferred names and pronouns.
- Give each other the benefit of the doubt. (Be charitable.)
- Be cautious of universal claims.
- Listen actively and attentively.
- Keep an open mind. (Expect to learn something new, or to have your views challenged by ideas, questions, and points of view different than your own.)
- Ask for clarification if you are confused.
- Challenge one another but do so respectfully.
- Allow others (and yourself) to revise or clarify ideas and positions in light of new information.
- Critique ideas, not people.
- Take responsibility for the quality of the discussion.
- Build on one another's comments; work toward shared understanding.
- Try to always have your readings in front of you.
- If you are offended by anything said during discussion, acknowledge it immediately.

DO NOT:

- Interrupt one another—even when you are excited to respond.
- Offer opinions without supporting evidence.
- Engage in put-downs.
- Make assumptions—ask questions instead.
- Do not monopolise discussion.

If you notice patterns that are troubling or impeding full engagement by others, please speak to me in office or via email. Such discussions should be understood as being strictly confidential. If it is not possible to speak to me, reach out to the department chair, an academic advisor, or a trusted mentor.

4.5. Covid-19. Up to date information about Dalhousie's current plans and policies regarding Covid-19 can be found online at https://www.dal.ca/covid-19-information-and-updates.html. As per the University's guidance for the Fall semester, **masks will not be required** in class. However, in the interest of public health, safety, and community-building, you are **strongly encouraged** to wear a mask when in the classroom. If you are not feeling well, please remain home. If you experience symptoms of COVID-19, including a cough (new or worsening) or a fever, you should complete a COVID-19 self-assessment and schedule a COVID-19 test through the province. You can consult the Nova Scotia public-health guidelines here: https://novascotia.ca/coronavirus/symptoms-and-testing/ If you are ultimately diagnosed with COVID-19, follow all guidance you receive from Public Health.

If any students are struggling, and are looking for mental health support, please make sure you reach out for help. There are a variety of mental health resources and supports available for students at www.dal.ca/mentalhealth. If you wish to chat with a mental health professional, same-day counselling appointments are available at the Student Health and Wellness Centre on the 2nd floor of LeMarchant Place. Appointments can be made by calling 902-494-2171 or online at: www.dal.ca/studenthealth/bookonline. Students can also access free and confidential mental health counselling support 24 hours per day, 7 days a week, by calling Good2Talk at 1-833-292-3698 or by texting GOOD2TALKNS to 686868. If you are in crisis, you can always call 902-429-8167 or 1-888-429-8167 to reach the Mental Health Mobile Crisis Team, 24 hours a day, 7 days a week.

4.6. Artificial Intelligence. All courses at Dalhousie emphasise the importance of academic integrity. Students are responsible for ensuring that all work they submit is their own, and, unless explicitly indicated by the instructor, AI-driven tools and generative AI models (including language models like the GPT suite, translation models like Google Translate or DeepL, editing tools like QuillBot, GrammaryGo, etc.) should not be used to generate ideas or written material for any class offered. For further information about academic integrity and your responsibilities please see the website of the University Secretariat https://www.dal.ca/dept/university_secretariat/academic-integrity.html.

4.5. Disclaimer. This document is meant to be binding. However, in the event of circumstances beyond my control, the course contents, evaluation scheme, and other parts of the syllabus are subject to change. Consistent with Sec. 16.1 of the academic calendar, any changes to the syllabus that affects assessment components, the weight of individual assessment components, or examination requirements with a value of 10 percent or more must have the approval of at least two-thirds of enrolled students in order to be valid. See the academic calendar for more details. https://academiccalendar.dal.ca/.

5. UNIVERSITY STATEMENTS

5.1. Territorial Acknowledgement. Dalhousie University is located in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq. We are all Treaty people.

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

5.3. Academic Integrity. At Dalhousie University, we are guided in all of our work by the values of academic integrity: honesty, trust, fairness, responsibility and respect. As a student, you are required to demonstrate these values in all of the work you do. The University provides policies and procedures that every member of the university community is required to follow to ensure academic integrity. (Read more: http://www.dal.ca/dept/university_secretariat/academic- integrity.html)

5.4. Accessibility. The Student Accessibility Centre is Dalhousie's centre of expertise for matters related to student accessibility and accommodation. If there are aspects of the design, instruction, and/or experiences within this course (online or in-person) that result in barriers to your inclusion please contact: (A) the Student Accessibility Centre (for all courses offered by Dalhousie with the exception of Truro), or (B) the Student Success Centre in Truro for courses offered by the Faculty of Agriculture. Your classrooms may contain accessible furniture and equipment. It is important that these items remain in place, undisturbed, so that students who require their use will be able to fully participate.

5.5. Conduct in the Classroom – Culture of Respect. Substantial and constructive dialogue on challenging issues is an important part of academic inquiry and exchange. It requires willingness to listen and tolerance of opposing points of view. Consideration of individual differences and alternative viewpoints is required of all class members, towards each other, towards instructors, and towards guest speakers. While expressions of differing perspectives are welcome and encouraged, the words and language used should remain within acceptable bounds of civility and respect.

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

5.7. Code of Student Conduct. Everyone at Dalhousie is expected to treat others with dignity and respect. The Code of Student Conduct allows Dalhousie to take disciplinary action if students don't follow this community expectation. When appropriate, violations of the code can be resolved in a reasonable and informal manner—perhaps through a restorative justice process. If an informal resolution can't be reached, or would be inappropriate, procedures exist for formal dispute resolution.

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

5.9. Originality Checking Software. The course instructor may use Dalhousie's approved originality checking software and Google to check the originality of any work submitted for credit, in accordance with the Student Submission of Assignments and Use of Originality Checking Software Policy. Students are free, without penalty of grade, to choose an alternative method of attesting to the authenticity of their work and must inform the instructor no later than the last day to add/drop classes of their intent to choose an alternate method.

5.10. Student Use of Course Materials. These course materials are designed for use as part of the Course Code at Dalhousie University and are the property of the instructor unless otherwise stated. Third party copyrighted materials (such as books, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian Copyright law. Copying this course material for distribution (e.g., uploading to a commercial third-party website) may lead to a violation of Copyright law.

6. UNIVERSITY POLICIES, GUIDELINES, AND RESOURCES FOR SUPPORT

Dalhousie courses are governed by the academic rules and regulations set forth in the Academic Calendar and the Senate. Important student information, services, and resources are available below:

University Policies and Programs

- Important Dates in the Academic Year (including add/drop dates)
- Classroom Recording Protocol
- Dalhousie Grading Practices Policy
- Grade Appeal Process
- Sexualized Violence Policy
- Scent-Free Program

Learning and Support Resources

- Academic Support - Advising Halifax, Truro
- Student Health & Wellness Centre
- On Track (helps you transition into university, and supports you through your first year at Dalhousie and beyond)
- Indigenous Student Centre. See also: Indigenous Connection.
- Elders-in-Residence: The Elders in Residence program provides students with access to First Nations elders for guidance, counsel and support. Visit the office in the Indigenous Student Centre or contact the program at elders@dal.ca or 902-494-6803.
- Black Student Advising Centre
- International Centre
- South House Sexual and Gender Resource Centre
- LGBTQ2SIA+ Collaborative
- Dalhousie Libraries
- Copyright Office
- Dalhousie Student Advocacy Service (DSAS)
- Dalhousie Ombudsperson
- Human Rights & Equity Services
- Writing Centre
- Study Skills/Tutoring

Classroom Safety

- Students who experience COVID symptoms should ***stay home*** and protect their classmates.
- If you must stay home because you are experiencing COVID symptoms, please email me so we can discuss accommodations for the missed class.
- Although Dalhousie has not mandated masks for the Fall semester, you are encouraged to wear a mask in class.
- I will not be able to speak with students immediately before or after class; however, I will hold regular office hours, and virtual office meetings may be scheduled via email.
- If public health conditions make it necessary, or advisable, classes may move online.
- All students must follow health and safety requirements on campus and should be considerate of others' health concerns. If an individual student fails to consider the safety of their colleagues, class may be suspended; repeated inconsideration may lead to the student being reported under the University Code of Student Conduct.