

Dalhousie University
Faculty of Arts and Social Science
Department of Philosophy
Faculty of Computer Science

PHIL 2490 / CSCI 3101
Social, Ethical, and Professional Issues in Computer Science
Winter 2022, 3 Credit Hours, Lecture

1. COURSE INFORMATION

* **Note:** Some of the details below may be subject to change. If any changes are made to the syllabus, an announcement will be posted as soon as possible on the course webpage, <https://dal.brightspace.com>.

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. Course Times + Location

Time: MW 16:05 - 17:25 Atlantic (optional discussion session)

Delivery: Online (asynchronous, except if otherwise noted)

Location: Virtual (Teams link will be available on the course webpage)

Course Webpage: <https://dal.brightspace.com>.

1.3. Office Hours + Location

Time: By appointment only.

Please use the following link to schedule an individual appointment:

<https://calendly.com/tlacroix>.

Location: virtually, via Microsoft Teams (link provided with appointment)

1.4. Contact Information

Dr Travis LaCroix (He/Him),

(Pronounced: / TRAH-viss LA-kwah /)

Email: tlacroix@dal.ca (preferred),

Phone: +1 (902) 494-3628

1.5. Important Dates

1. Final Withdrawal Date (w/o Academic Penalty): January 28, 2022
2. Reading Week (no classes): February 21-25, 2022
3. Final Withdrawal Date (w/ 'W' Notation): March 7, 2022

1.6. Calendar Course Description

Computers can enable people to do things that our present laws and policies were not formulated to cover (hacking, sharing files on the internet, and companies sharing data). In such cases, people need to be able to decide for themselves the best course of action and defend such decisions. This course

aims at developing the ethical reasoning skills and sensitivities that computer professionals will need to make good decisions and to justify them. The course includes a general introduction to ethical theories and their use in making and justifying decisions. We then consider various issues and case studies, illustrating the kinds of problems that can arise from the use and misuse of computers and technology: the responsibilities of computing professionals; ethics on the internet (hacking, computer crime, netiquette); privacy and information; intellectual property; social and political issues (digital divide, computers and work, the internet as a democratic technology).

Note: This course does not presume any specialised computer knowledge. Both the Philosophy and the Computer Science sections will be responsible for the same type and level of work and grading.

1.7. Description of Class Format

Owing to the ongoing uncertainty surrounding the global pandemic, this course will be offered entirely online for the duration of the winter semester. This will consist of:

1. Short, asynchronous lectures (uploaded to the course webpage).
2. Optional, synchronous, drop-in discussions, to be hosted via Microsoft Teams at the scheduled meeting time (MW, 16:05-17:25 Atlantic).

1.8. 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)** it is recommended 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 access the (optional) synchronous discussion section and office hours.

1.9. Prerequisites

No previous knowledge of computing or of philosophy is assumed. Some familiarity with computers is an advantage.

1.10. Cross-Listing

PHIL 2490.03 / CSCI 3101.03

1.11. Exclusions

COMP 3090.03

1.12. Course Rationale

Given the increasing ubiquity of computers in society, and the unique ethical issues which arise from their use and integration, it will be important to consider ethical, social, and professional issues arising from the use and misuse of computers and technology, both from the perspective of professionals and users.

1.13. Course Learning Outcomes

As a result of participating in PHIL 2490 / CSCI 3101, students will be able to:

1. Build a store of knowledge of issues, and perspectives on them, in computer ethics.
2. Compare and contrast a variety of ethical theories and their applications to computing technology.
3. Read and critique positions on issues in computer ethics.
4. Formulate concrete theses concerning issues in computer ethics.
5. Defend a thesis on an issue of computer ethics with arguments both textually and verbally.
6. Understand some of the major theories in philosophical ethics and how to use them to make arguments.
7. Improve their writing, reading, and argumentation skills.

1.14. Required Texts

Except where 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 for each week will be posted on the course webpage.

1.15. Detailed Course Description

We will consider ethical, social, and professional issues arising from the use and misuse of computers and technology. The course is oriented to the perspective of the **computer professional**, aiming at developing ethical reasoning skills and sensitivities to the myriad of issues that could arise for the professional, and to **the user**, aiming at understanding the nature of our rights and responsibilities in an increasingly online world. A key feature will be to explore and understand the unique ethical issues which arise from the use of computers. There are three main classes of things which fall under computer use: computer hardware/infrastructure; programs; and data. As we will see, these are not always distinct categories, and computers have some properties which no other artifacts do.

1.16. Summary of Topics

Week 0 Course Introduction

MODULE 1 : PHILOSOPHICAL ETHICS

Week 1 Meta-Ethics

Week 2 Normative Theories

MODULE 2 : PROFESSIONAL ETHICS

Week 3 Codes of Ethics and Professional Conduct

Week 4 Whistleblowing and Conflicting Interests

MODULE 3 : INTELLECTUAL PROPERTY

Week 5 Justifications of intellectual property

Week 6 Open Source and Open access

Week 7 *Winter Study Break – No Class (University Open)*

MODULE 4 : DATA PROTECTION, PRIVACY, AND SECURITY

Week 8 Privacy, Power, and Surveillance

Week 9 Data Protection and Privacy

MODULE 5: SOCIAL CONSIDERATIONS AND SOCIAL RESPONSIBILITY

Week 10 Legal and Moral Responsibility

Week 11 Regulation and Anti-Trust

MODULE 6: ETHICS OF AI, MACHINE LEARNING, AND EMERGING TECH

Week 12 Bias and Fairness

Week 13 Transparency and Explanation

Week 14 *Exam Period – No Class (University Open)*

Week 15 *Exam Period – No Class (University Open)*

1.17. Required Readings.

All of the required readings for this course will be made available online through the Learning Management System, <https://dal.brightspace.com/>.

2. GRADING

2.1. Assessment Details

Weight	Description	Deadline
0%	Plagiarism Quiz	Wednesday, February 9
40%	12x Weekly Quizzes*	Every Friday at 17:00, Atlantic (Beginning Jan 14)
60%	3x Short Essays (~1250 words)**	Thursday, February 10 Thursday, March 10 Thursday, April 7
3%	Discussion Forum Posts (Bonus)	Ongoing
2%	Course Evaluation Game (Bonus)	End of Term

*Note that the lowest two grades for the weekly quizzes will be ignored. An alternative way of reading this is that two of the quizzes can be considered 'optional'.

**Note that the lowest of the three grades for the writing assignment will be ignored. An alternative way of reading this is that one of the writing assignments is optional.

2.4. Assignment Details

Where relevant, all assignments should be submitted via the course webpage. Detailed instructions for assignment submission will be posted on the course webpage (<https://dal.brightspace.com>).

2.4.1. Plagiarism Quiz

0 marks total. In order to be eligible to submit your papers, you will be required to take 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 have your papers graded. The quiz will be available on the course webpage, and it can be submitted at any time prior to the deadline for the first essay. 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, then your essay will be ineligible for submission until the quiz is completed. If the quiz is completed after the deadline for the paper, then your paper will be considered late (up to the date that you obtain 100% on the quiz).

2.4.2. Weekly Quizzes (x12)

40 marks total. At the end of each week (beginning January 14) there will be a short, timed, 10-question quiz on the required readings from that week. The quizzes will be released 24 hours before the deadline and can be completed any time from the time of release up to the deadline. The grades will be automatically released the day after the deadline. As such, no late quizzes will be graded. The lowest two grades from the 12 quizzes will be dropped from the final grade.

2.4.3. Writing Assignments (x3)

60 Marks Total. You will submit three short papers throughout the semester (~1250 words) in response to a particular prompt. There will be a number of options, and you will choose one on which to write your paper. Further details will be given in class. A detailed rubric will be provided on the course webpage. The respective deadlines for the three papers are as follows:

Paper 1: Thursday, February 10

Paper 2: Thursday, March 10

Paper 3: Thursday, April 7

2.4.4. Bonus Marks

1. **Up to 5 Marks Total.** Two bonus points in the class will be awarded to everyone registered just in case a quorum (at least 3/4) of students completes the year-end course evaluations. An additional (all-or-nothing) bonus of three points will be awarded to students who make meaningful contributions to the discussion forums for *three* different weeks throughout the semester. More details for each of these components are given below.

Course Evaluations Game. (2 Marks) If a 3/4 majority of students fill out the year-end evaluation, then everyone will receive two 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.

Forum Posts. (3 Marks) Three bonus marks (all-or-nothing) will be awarded to students who make meaningful contributions to the discussion forums for *three* different weeks throughout the semester. In this case, a meaningful contribution may consist of (1) thoughtful commentary/engagement with a reading; (2) a substantive question about a reading, along with the context needed to motivate that question; (3) respectful engagement with another student's discussion forum post; among other possibilities.

2.5. Grade Scale

The grade scale and definitions for letter grades for this course can be found online at https://www.dal.ca/campus_life/academic-support/grades-and-student-records/grade-scale-and-definitions.html.

3. COURSE POLICIES

3.1. Contact Policy

My email policy is to respond to any enquiries within two workdays of receipt. If I have not responded to your email within this time frame, you are entitled to (and should) send a follow-up email. Please put the course code ('PHIL 2490 / CSCI 3101, as applicable) in the subject-line of your email.

3.2. Late Submission Policy

Work that is submitted late, without a documented excuse, will be penalized 2 points per 24-hour period after the deadline. **NOTE:** *This policy applies only to the writing assignments. Late weekly quizzes will not be accepted.*

3.3. Ground Rules for Discussion

These 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 might be 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, feel free to reach out to the department chair, and academic advisor, or a trusted mentor.

3.4. 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>.

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](tel:1-833-292-3698) or by [texting GOOD2TALKNS](text: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. UNIVERSITY STATEMENTS

4.1. Territorial Acknowledgement:

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

4.2. 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.”

4.3. 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)

4.4. 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:

- the [Student Accessibility Centre](#) (for all courses offered by Dalhousie with the exception of Truro)
- 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.

4.5. 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.

4.6. 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).

4.7. 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.

4.8. 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.

4.9. 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.

4.10. 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 as follows:

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 are not fully vaccinated should familiarise themselves with the new University policy requiring vaccination *or* regular testing.
- 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.
- The University has mandated masks through September, and it may recommend continuing to wear them later this term.

- I will not be able to speak with students immediately before or after class; however, I will hold office hours shortly after class; and virtual office meetings may be scheduled via email.
- If public health conditions make it necessary, or clearly advisable, classes may be temporarily moved 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.