

*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 complete syllabus begins on the next page.

PHIL 3520, 5520; POLI 3496 – *Philosophy of Social Science*, Dalhousie University, Fall 2023

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

Delivery: In person, except when otherwise noted.

Room: Killam Library, Room 4106;

Time: T 14:35 - 17:25 Atlantic

Contact: Dr. Travis LaCroix, tl@dal.ca, McCain 3180

Office Hours by Appointment

Textbooks: None required. Lecture slides and additional resources available on Brightspace.

Important Dates.

04 Sep 2023 Labour Day – *University Closed*

02 Nov 2023 Last day to drop with a ‘W’

05 Sep 2023 Classes begin – Fall term

13 Nov 2023 Fall break begins

19 Sep 2023 Last day to add / change classes

17 Nov 2023 Fall break ends

02 Oct 2023 T&R – *University Closed*

05 Dec 2023 Monday classes held

04 Oct 2023 Last day to drop without a ‘W’

06 Dec 2023 Monday classes held

09 Oct 2023 Thanksgiving - *University Closed*

06 Dec 2023 Classes end – fall term

Schedule of Topics. (More details provided in Section 2, Pages 3-8)

Week 01	Sep. 05	Introduction to the Course
Week 02	Sep. 12	Game Theory and the Philosophy of Social Science
Week 03	Sep. 19	Cooperation, Conventions, and Social Norms
Week 04	Sep. 26	Signals
Week 05	Oct. 03	Justice and Fairness I: Ultimata
Week 06	Oct. 10	Justice and Fairness II: Bargaining
Week 07	Oct. 17	Inequity I: Minorities and Power
Week 08	Oct. 24	Inequity II: Segregation and Racial Capitalism
Week 09	Oct. 31	Social Networks and Misinformation
Week 10	Nov. 07	Applications and Criticism
Week 11	Nov. 14	<i>Fall Break — No Class (University Open)</i>
Week 12	Nov. 21	Model Presentations
Week 13	Nov. 28	Model Presentations
Week 14	Dec. 05	In Lieu Day – Monday Classes Held (<i>No Class Meeting</i>)
Week 15	Dec. 12	Exam Period (<i>No Class</i>)

PHIL 3520, POLI 3496 Grade Breakdown. (More details provided in Section 3, Pages 9-12)

Weight	Description	Deadline
20%	Weekly Quizzes (Best 8/9, 2.5 pts each)	Fridays by 23:59 Atlantic
10%	Five-Minute Paper (Best 2/3, 5 pts each)	<i>Various</i> (See sec. 3)
60%	Modelling Project	<i>Various</i> (See sec. 3)
10%	Peer Evaluation	21, 28 Nov. by end of class
2%	Course Evaluation Game	End of Term (SLEQ close date)

PHIL 5520 Grade Breakdown. (More details provided in Section 3, Pages 9-12)

Weight	Description	Deadline
10%	Weekly Quizzes (best 4/9, 1.25 pts each)	Fridays by 23:59 Atlantic
30%	Professional Pathways Project	<i>Various</i> (in consult with professor)
30%	Modelling Project	<i>Various</i> (See sec. 3)
30%	Short Research Essay	05 Dec. by 23:59 Atlantic
2%	Course Evaluation Game	End of Term (SLEQ close date)

Complete Course Policies and University Statements provided in Sections 4, 5, & 6 Pages 12-16.

Dalhousie University
Faculty of Arts and Social Science
PHIL 3520, 5520; POLI 3496 – Philosophy of Social Science
Fall 2023, 3 Credit Hours, Lecture, Discussion

“Social Dynamics: Formal Approaches to the Philosophy of Social Science”

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	T 14:35 - 17:25 Atlantic
Delivery	In-Person, except if otherwise noted
Location	Studley Killam Library, Room 4106

1.4. 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.

04 Sep 2023	Labour Day – University closed
05 Sep 2023	Classes begin – Fall term
19 Sep 2023	Last day to add / change classes
02 Oct 2023	National Day for Truth & Reconciliation – University Closed
04 Oct 2023	Last day to drop without a ‘W’ notation
09 Oct 2023	Thanksgiving Day – <i>University closed</i>
02 Nov 2023	Last day to drop with a ‘W’ notation
13 Nov 2023	Fall break begins
17 Nov 2023	Fall break ends
05 Dec 2023	Monday classes held
06 Dec 2023	Monday classes held (No class meeting)
06 Dec 2023	Classes end – fall term

1.5. Calendar Course Description. Can people from different cultures understand each other? What is it to be a member of a culture? Are societies best thought of as collections of individuals, or are individuals constituted by societies? In what sense are the social sciences “sciences”? Are societies describable by explanatory laws? What counts as an explanation of human behaviour? This course explores these and related questions through a reading of classic and contemporary philosophers and social theorists.

1.6. 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 virtually.

1.7. Prerequisites. Two full credits in philosophy.

1.8. Cross-Listing. PHIL 3520, PHIL 5520, POLI 3496

1.9. Course Rationale. The modern landscape of social science has been enriched by the integration of formal methodologies, which offer novel insights into understanding complex social phenomena.

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

- **Understand** some foundational concepts and key principles of evolutionary game theory and its use in modelling social phenomena.
- **Analyze and compare** the strengths and limitations of formal modeling techniques in social science research.
- **Investigate** the role of cultural evolution in shaping social behavior and **understand** how evolutionary game theory can be used to study the evolution and stability of cultural traits and social norms.
- **Synthesise and apply** formal approaches to real-world social phenomena, demonstrating the ability to identify relevant research questions and formulate testable hypotheses.
- Effectively **build and apply** mathematical models to the study of social phenomena.

1.11. 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.

1.12. Detailed Course Description. This course explores formal approaches (evolutionary game theory, network models, and agent-based models) and their applications in understanding and explaining social phenomena. The course will critically examine the philosophical foundations of these formal approaches and their relevance in addressing various questions in social science. Each week will focus on specific game structures and models that illustrate their applications in explaining real-world social phenomena. By the end of the course, students will gain a deep understanding of the conceptual and methodological aspects of formal approaches in the philosophy of social science.

2. COURSE SCHEDULE

2.1. Summary of Topics.

Week 01	Sep. 05	Introduction to the Course
Week 02	Sep. 12	Game Theory and the Philosophy of Social Science
Week 03	Sep. 19	Cooperation, Conventions, and Social Norms
Week 04	Sep. 26	Signals
Week 05	Oct. 03	Justice and Fairness I: Ultimata
Week 06	Oct. 10	Justice and Fairness II: Bargaining
Week 07	Oct. 17	Inequity I: Minorities and Power
Week 08	Oct. 24	Inequity II: Segregation and Racial Capitalism
Week 09	Oct. 31	Social Networks and Misinformation
Week 10	Nov. 07	Applications and Criticism
Week 11	Nov. 14	<i>Fall Break — No Class (University Open)</i>
Week 12	Nov. 21	Model Presentations
Week 13	Nov. 28	Model Presentations
Week 14	Dec. 05	In Lieu Day – Monday Classes Held (<i>No Class Meeting</i>)
Week 15	Dec. 12	Exam Period (<i>No Class</i>)

2.2. Detailed Course Schedule. Except where otherwise noted, the required readings for this course will be made available online through the Learning Management System, <https://dal.brightspace.com/>.

Week 1	Introduction to the Course			
Date	In Class Meeting	Game / Model	Readings	Notes
Tuesday 05 Sept.	Lecture 1: Introduction to the Course	Two Truths and One Lie	Required • Syllabus	Quiz 1 available on Brightspace (18:00 ADT) <i>Submit by Friday Sept. 08, 23:59 ADT</i>
Week 2	Game Theory and the Philosophy of Social Science			
Tuesday 12 Sept.	Lecture 2 Classical Game Theory – Key Concepts	Rock-Paper-Scissors Prisoner's Dilemma	Background • Ross (2021) Required • Ullman-Margalit (1977a)	Quiz 2 available on Brightspace (18:00 ADT) <i>Submit by Friday Sept. 15, 23:59 ADT</i>
Week 3	Cooperation, Conventions, and Social Norms			
Tuesday 19 Sept.	Lecture 3 Dynamic Approaches to Game Theory	Coordination and Anti-Coordination Games Hawk-Dove	Background • Skyrms and Zollman (2010) Required • Lewis (1969) • Bicchieri (2006a) Background • Ullman-Margalit (1977b)	Quiz 3 available on Brightspace (18:00 ADT) <i>Submit by Friday Sept. 22, 23:59 ADT</i>
Week 4	Signals			
Tuesday 26 Sept.	Lecture 4 Fitness and the Replicator Dynamics	Lewis-Skyrms Signalling Games	Background • Alexander (2021) Required • Skyrms (2010a) • Skyrms (2010b) Additional • LaCroix (2019)	Quiz 4 available on Brightspace (18:00 ADT) <i>Submit by Friday Sept. 29, 23:59 ADT</i>
Week 5	Justice and Fairness I: Ultimata			
Tuesday 03 Oct.	Lecture 5 <i>Learning Dynamics</i>	Ultimatum Game Stag Hunt	Additional • Skyrms (1996) Required • Bicchieri (2006b) • Forber and Smead (2014)	Quiz 5 available on Brightspace (18:00 ADT) <i>Submit by Friday Oct. 06, 23:59 ADT</i>

Week 6	Justice and Fairness II: Bargaining			
Date	In Class Meeting	Game / Model	Readings	Notes
Tuesday 10 Oct.	Lecture 6 Agent-Based Models	Nash Bargaining Game	Background • Nash (1950) Required • Skyrms (1994) • Axtell, Epstein, and Young (2000) Additional • Alexander and Skyrms (1999)	Quiz 6 available on Brightspace (18:00 ADT) <i>Submit by Friday Oct. 13, 23:59 ADT</i>
Week 7	Inequity I: Minorities and Power			
Tuesday 17 Oct.	Lecture 7 Cultural Evolution and Social Categories		Background • Young (1993) Required • Bruner (2019) • LaCroix and O'Connor (2022) Additional • Mohseni et al. (2021)	Quiz 7 available on Brightspace (18:00 ADT) <i>Submit by Friday Oct. 20, 23:59 ADT</i>
Week 8	Inequity II: Segregation and Racial Capitalism			
Tuesday 24 Oct.	Lecture 8 Stability Concepts and Their Relations	Nash Bargaining Game Schelling Segregation Model	Background • Al-Bulushi (2020) Required • Bright et al. (2022) • Schelling (1971) Additional • Popa-Wyatt et al. (2021)	Quiz 8 available on Brightspace (18:00 ADT) <i>Submit by Friday Oct. 27, 23:59 ADT</i>
Week 9	Social Networks: Misinformation, Polarisation, and Conformity			
Tuesday 31 Oct.	Lecture 9 Network Models	Bala / Goyal Network Models Watts / Strogatz Network Models	Background • Watts and Strogatz (1998) Required • Mohseni and Williams (2021) • LaCroix et al. (2021) Additional • Zollman (2007)	Quiz 9 available on Brightspace (18:00 ADT) <i>Submit by Friday Nov. 03, 23:59 ADT</i>

Week 10	Applications and Criticism		
Tuesday 07 Nov.	Lecture 10 Modelling Approaches to Social Science		Background <ul style="list-style-type: none"> • Driscoll (2018) Required <ul style="list-style-type: none"> • Mayo-Wilson and Zollman, (2021) • Feiten (2023) Additional <ul style="list-style-type: none"> • Fumagalli (2015)
Week 11	Fall Study Break		
Tuesday 14 Nov.	<i>No Class (University Open)</i>		
Week 12	Model Presentations I		
Tuesday 21 Nov.	Modelling Project <i>In-Class Presentations</i>		Peer review <i>due at the end of class</i>
Week 13	Model Presentations II		
Tuesday 28 Nov.	Modelling Project <i>In-Class Presentations</i>		Peer review <i>due at the end of class</i>
Week 14	In Lieu Day		
Tuesday 05 Dec.	Monday Classes Held <i>(No Class Meeting)</i>		Modelling Project (PHIL 3520, POLI 3496) Final Reports due by 23:59 AST Final Research Essay (PHIL 5520) Due by 23:59 AST
Week 15	Exam Period <i>(No Class Meeting)</i>		
Tuesday 12 Dec.			

2.3 Complete List of Required Readings

Week 1 (September 5): Introduction to the Course

(Req.) Syllabus

Week 2 (September 12): Game Theory and the Philosophy of Social Science

- (Bac.) Don Ross. 2021. "Game Theory" Edward N. Zalta (ed.) *The Stanford Encyclopedia of Philosophy*. <https://plato.stanford.edu/archives/fall2021/entries/game-theory/>.
- (Req.) Edna Ullman-Margalit. 1977. "Aim and Method" *The Emergence of Norms*. Oxford: Oxford University Press. 1-17.

Week 3 (September 19): Cooperation, Conventions, and Social Norms

- (Bac.) Brian Skyrms and Kevin J. S. Zollman. 2010. "Evolutionary Considerations in the Framing of Social Norms" *Politics, Philosophy & Economics* 9(3): 265-273.
- (Req.) David Lewis. 1969. "Coordination and Convention" *Convention: A Philosophical Study*. Oxford: Blackwell Publishers. 5-51.
- (Req.) Christina Bicchieri. 2006. "The Rules We Live By" *The Grammar of Society: The Nature and Dynamics of Social Norms*. Cambridge: Cambridge University Press. 1-54.
- (Add.) Edna Ullman-Margalit. 1977. "Co-ordination Norms" *The Emergence of Norms*. Oxford: Oxford University Press. 74-133.

Week 4 (September 26): Signals

- (Bac.) J. McKenzie Alexander. 2021. "Evolutionary Game Theory" Edward N. Zalta (Ed.) *The Stanford Encyclopedia of Philosophy*. <https://plato.stanford.edu/archives/sum2021/entries/game-evolutionary/>.
- (Req.) Brian Skyrms. 2010. "Evolution in Lewis Signaling Games" *Signals: Evolution, Learning, & Information*. Oxford: Oxford University Press. 63-72.
- (Req.) Brian Skyrms. 2010. "Learning in Lewis Signalling Games" *Signals: Evolution, Learning, & Information*. Oxford: Oxford University Press. 93-105.
- (Add.) Travis LaCroix. 2019. "Evolutionary Explanations of Simple Communication: Signalling Games and Their Models" *Journal for General Philosophy of Science*. 51: 19-43.

Week 5 (October 03): Justice and Fairness I - Ultimata

- (Bac.) Brian Skyrms. 1996. "Fairness and Commitment". *Evolution of the Social Contract*. Cambridge: Cambridge University Press. 23-42.
- (Req.) Christina Bicchieri. 2006. "The Evolution of a Fairness Norm" *The Grammar of Society: The Nature and Dynamics of Social Norms*. Cambridge: Cambridge University Press. 213-234.
- (Req.) Patrick Forber and Rory Smead. 2014. "The Evolution of Fairness Through Spite". *Proceedings of the Royal Society B: Biological Sciences* 281(1780): 1-8.

Week 6 (October 10): Justice and Fairness II: Bargaining

- (Bac.) John F. Nash Jr. 1950. "The Bargaining Problem" *Econometrica*. 18(2): 155-162.
- (Req.) Brian Skyrms. 1994. "Sex and Justice" *The Journal of Philosophy* 91(6): 305-320.
- (Req.) Robert Axtell, Joshua M. Epstein, and H. Peyton Young. 2000. "The Emergence of Classes in a Multi-Agent Bargaining Model" *Center on Social and Economic Dynamics Working Paper No. 9*. 1-21.
- (Add.) Jason Alexander and Brian Skyrms. 1999. "Bargaining with Neighbours: Is Justice Contagious?" *Journal of Philosophy*. 96(11): 588-598.

Week 7 (October 17): Inequity I – Minorities and Power

- (Bac.) H. Peyton Young. 1993. An Evolutionary Model of Bargaining. *Journal of economic theory* 59(1): 145-168
- (Req.) Justin P. Bruner. 2019. Minority (Dis)advantage in Population Games” *Synthese* 196(1): 413-427.
- (Req.) Travis LaCroix and Cailin O’Connor. 2022. “Power by Association” *Ergo: An Open Access Journal of Philosophy*. 8(29): 163-189.
- (Add.) Aydin Mohseni, Cailin O’Connor, and Hannah Rubin. 2021. “On the Emergence of Minority Disadvantage: Testing the Cultural Red King Hypothesis” *Synthese* 198: 5599-5621.

Week 8 (October 24): Inequity II – Segregation and Racial Capitalism

- (Bac.) Yousuf Al-Bulushi. 2020. “Thinking Racial Capitalism and Black Radicalism from Africa: An Intellectual Geography of Cedric Robinson’s World-System” *Geoforum* 132: 252-262.
- (Req.) Liam Kofi Bright, Nathan Gabriel, Cailin O’Connor, and Olúfemi Táíwò. 2022. “On the Stability of Racial Capitalism”. *PhilSci Archive*. 1-28.
- (Req.) Thomas C. Schelling. 1971. “Dynamic Models of Segregation” *The Journal of Mathematical Sociology* 1(2): 143-186.
- (Add.) Mihaela Popa-Wyatt, Roland Mühlenbernd, and Jeremy L. Wyatt. 2021. “Fairness and Signalling in Bargaining Games”.

Week 9 (October 31)

- (Bac.) Duncan J. Watts, and Steven H. Strogatz. 1998. “Collective dynamics of ‘Small-World’ Networks. *Nature* 393(6684): 440-442.
- (Req.) Aydin Mohseni and Cole Randall Williams. 2021. “Truth and Conformity on Networks.” *Erkenntnis*. 86: 1509-1530.
- (Req.) Travis LaCroix, Anders Geil, and Cailin O’Connor. 2021. “The Dynamics of Retraction in Epistemic Networks” *Philosophy of Science*. 88(3): 415-438.
- (Add.) Kevin J. S. Zollman. 2007. “The Communication Structure of Epistemic Communities” *Philosophy of Science* 74(5): 574-587.

Week 10 (November 7)

- (Bac.) Catherine Driscoll. 2018. “Cultural Evolution and the Social Sciences: A Case of Unification?” *Biology & Philosophy* 33(7): 1-17.
- (Req.) Conor Mayo-Wilson and Kevin J. S. Zollman. 2021. The Computational Philosophy: Simulation as a Core Philosophical Method. *Synthese* 199: 3647-3673.
- (Req.) Tim Elmo Feiten. 2023. “The Map/Territory Relationship in Game-Theoretic Modeling of Cultural Evolution” *Philosophy of Science*. 1-14.
- (Add.) Roberto Fumagalli. 2015. No Learning from Minimal Models. *Philosophy of Science* 82(5): 798-809.

3. GRADING

3.1. PHIL 3520, POLI 3496 Grading Scheme (Overview). The breakdown for the final grade and submission details for the undergraduate sections of this course (PHIL 3520, POLI 3496) is given as follows (further details on each component is given below in Section 3.3).

Points	Description	Deadline
20	Weekly Quizzes, (9 x 2.5 points each, best 8 out of 9)	Fridays by 23:59 Atlantic (Weeks 1, 2, 3, 4, 5, 6, 7, 8, 9) <i>Submitted online via Brightspace</i>
10	Five-Minute Paper (3 x 5 points each, best 2 out of 3)	Three times throughout the semester <i>Submitted in person</i>
60	Modelling Project	Checkpoint 1, 10 Oct. , by end of class Checkpoint 2, 24 Oct. , by end of class Checkpoint 3, 07 Nov. , by end of class Presentations, 21, 28 Nov. , in class Final Report, 05 Dec. , by 23:59 Atlantic
10	Peer Evaluation	Tuesday, 21 Nov., by end of class and Tuesday, 28 Nov., by end of class <i>Submitted in person</i>
2	Course Evaluation Game	<i>End of Term (SLEQ close date)</i> <i>Submitted online</i>

3.2. PHIL 5520 Grading Scheme (Overview). The breakdown for the final grade and submission details for the graduate section of this course (PHIL 5520) is given as follows (further details on each component is given below in Section 3.3).

Points	Description	Deadline
10	Lecture Quizzes, (9 x 1.25 points each, best 4 out of 9)	Fridays by 23:59 Atlantic (Weeks 1, 2, 3, 4, 5, 6, 7, 8, 9) <i>Submitted online via Brightspace</i>
30	Professional Pathways Projects	Three times throughout the semester
30	Modelling Project	Checkpoint 2, 24 Oct. , by end of class Checkpoint 3, 07 Nov. , by end of class Presentations, 21, 28 Nov. , in class Final Report (optional), 05 Dec. , by 23:59 AST
30	Short Research Essay (~3000 words)	05 December by 23:59 Atlantic
0	Peer Evaluation	Tuesday, 21 Nov., by end of class and Tuesday, 28 Nov., by end of class <i>Submitted in person</i>
2	Course Evaluation Game	<i>End of Term (SLEQ close date)</i> <i>Submitted online</i>

3.3. Assignment Details. Instructions for assignment submission will be posted on the course webpage.

3.3.1. Quizzes (All Sections). 20 Points Total. Each week's lecture(s) and readings for the first nine weeks will have a short quiz to reinforce some of the concepts discussed that week. The quizzes will typically be released after the class meeting, by 18:00 Atlantic, and they will be due by the subsequent Friday at 23:59 Atlantic. **No late submissions will be accepted.** Each quiz will consist of around 10-15 short questions (multiple choice, true/false, matching, short answer, etc.). There will be 9 quizzes in total. Each individual quiz will be worth 2.5 points. The best eight of nine quizzes (PHIL 3520, POLI 3496) or four of nine quizzes (PHIL 5520) will be counted toward the 20 points for the quiz grade. The deadlines (Fridays) for the quizzes are as follows. **Submissions on Brightspace.**

Quiz 1 – Sep. 08, 23:59 Atlantic

Quiz 2 – Sep. 15, 23:59 Atlantic

Quiz 3 – Sep. 22, 23:59 Atlantic

Quiz 4 – Sep. 29, 23:59 Atlantic

Quiz 5 – Oct. 06, 23:59 Atlantic

Quiz 6 – Oct. 13, 23:59 Atlantic

Quiz 7 – Oct. 20, 23:59 Atlantic

Quiz 8 – Oct. 27, 23:59 Atlantic

Quiz 9 – Nov. 03, 23:59 Atlantic

3.3.2. Five-Minute Essay (PHIL 3520, POLI 3496 Only). 10 Points Total. Three (3) times throughout the semester, students will write a very brief in-class essay on a reading that is assigned for that week. Students will have five minutes to write a concise summary of the main points and arguments presented in one of the readings for that week. The specific weeks will not be announced in advance. Each submission will be worth five points, graded on demonstrated understanding of the main ideas of the paper, conciseness and clarity, relevance to the seminar discussion, and writing quality. The best two of three grades will be counted toward the final mark. **Submissions in person.**

3.3.3. Professional Pathways Project (PHIL 5520 Only). 30 Points Total. Over the course of the semester, all students registered in the graduate section (or those who choose to be graded according to the graduate scheme) will submit three (3) assignments emphasising skills important to academic philosophy. These will be chosen, in consultation with the professor, from the following (ideally, but not necessarily, distinct) options:

- a. **Conference Commentary.** Prepare and present a commentary on one of the required readings. The commentary should be approximately 10 minutes in length (about 1200 words), including a brief summary of the paper, as well as objections and suggestions for improving the position. The commentary will be presented to the class in the week in which the reading chosen is scheduled.
- b. **Referee Report.** Prepare a mock “referee report” on one of the required readings.
- c. **Public Philosophy.** Write an op-ed piece or blog post, intended for a non-academic audience, on any topic related to the course.
- d. **Conference Presentation.** Prepare an APA-style conference presentation on the topic of your research paper, to be presented to the class in the final meeting (November 28), with a short Q&A.
- e. **Other Suggestions.** If so inclined, graduate students may suggest an alternative to any of these options to focus on other aspects of professional philosophy with which the student would like to gain some experience.

3.3.4. Modelling Project (All Sections). 30-60 Points Total. Over the course of the semester, students will work in groups (PHIL 3520, POLI 3496) or individually (PHIL 5520) to construct a

formal model that captures and explains a chosen social phenomenon. Through this exercise, students will apply their understanding of formal approaches to social dynamics, delve into the philosophy behind evolutionary game theory, and creatively engage with real-world social dynamics by designing a model that reflects the chosen phenomenon, its underlying strategic interactions, and resulting dynamics. The assignment will include several checkpoints throughout the semester to ensure students are on track with their projects.

Checkpoint 1 - Group Selection (10 October): The modelling project will be completed in groups of 2-4 students (undergraduate sections) or individually (graduate section). Groups should ideally have a balanced mix of skills, interests, and perspectives. Groups should be composed by the end of class on Tuesday, 10 October (Week 6); the composition of groups will be submitted in class. If you are not a member of a group by this date, you will be assigned to one. The finalised groups will be announced on Brightspace. Once the groups are formed, you should reach out to your group members via email or the Brightspace discussion forum. **Note:** Students registered in the graduate section of the course are exempt from group selection.

Checkpoint 2 – Proposal and Phenomenon Selection (24 October): By Week 8, each group should choose a social phenomenon they wish to model and explore. A written description will be handed in via Brightspace. Groups should identify the chosen social phenomenon, provide a brief rationale for its relevance and interest, explain why they phenomenon can be modelled using formal approaches, and highlight the potential contributions of modelling to understanding the phenomenon.

Checkpoint 3 – Game and Dynamics (07 November): By Week 10, each group should submit an outline the underlying game that models the chosen phenomenon and the dynamics they intend to use to analyse that game.

Checkpoint 4 – Presentations (21, 28 November): In Weeks 12 and 13, each group will present their model to the class. The in-class presentation should be visually engaging, with clear slides; it should outline the key components of the model (the chosen phenomenon, game, dynamics, mathematical representation, etc.), explain the rationale behind design choices and modelling assumptions, and share preliminary results or insights derived from simulation (if applicable).

Checkpoint 5 – Write up (05 December): On the last day of the semester, each group will submit a write-up of their model, based on their presentation and the feedback received. **Note:** Students registered in the graduate section of the course are exempt from the write-up component of the project if the research essay contains a model.

Bonus (Up to 5 additional points): Groups who construct a working model with novel results will be eligible to receive up to 5 bonus points toward the modelling project. Code should be written in Python, Java, or R. It is **acceptable** in this (and only this) case to use generative AI models to aid in writing (see Section 4.5 in Course Policies below). However, to achieve the bonus points, the full working code must be submitted by the deadline for the report, and students must be capable of demonstrating their understanding of the code during office hours.

3.3.5. Peer Evaluation (All Sections). 0-10 Points Total. During the presentations, each student will be provided with a rubric for assessing their peers' work. The evaluations should be submitted by the end of class in each of the final two meetings (21, 28 November). Further instructions will be provided on Brightspace.

3.3.6. Research Essay (PHIL 5520 Only). 30 Points Total. Students registered in the graduate section of this course (PHIL 5520) must submit a final research paper no later than Tuesday, 05

December. Students may choose to submit one (1) draft for detailed feedback no later than Tuesday, 21 November. The final paper should be accompanied by an abstract of no more than 150 words. The paper itself should be no longer than 3000 words. The paper may be based on the modelling project, in which case the student does not need to submit a final report for the modelling project, but the paper should include simulation results and code. If the paper is a philosophical paper, rather than a formal approach, then the student must also submit a report as a part of the modelling project.

3.3.7. Bonus Marks. (Up to 2 Points Total). Two (2) bonus marks will be awarded to everyone registered just in case a quorum of at least 3/4 of students registered complete the year-end course evaluations.

Course Evaluations Game. 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).

3.4. How to Succeed in This Course. Facility with formal methods is much like learning a new language. It is not enough to grasp the grammar of the language in the abstract—you have to 'speak' the language through repeated use and practice. To this end, the assignments are meant to practice and develop fluency with the concepts learned in class. 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 listens)! Finally, you should attend all the lectures, submit the quizzes on time, engage fully in the modelling project, and complete the problem peer review assignment. If you do all this, you should do well in the class (with probability close to one)!

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—e.g., requesting an extension on a written assignment—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 ('PHIL 3520', 'POLI 3496', or 'PHIL 5520', 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. Late Submission Policy. No late submissions will be accepted on weekly quizzes. Presentations will be scheduled for the final two meetings; if you do not attend these meetings, you will be ineligible to receive a grade on the modelling project or the peer evaluation. Everyone registered in the course is automatically granted a 2-day extension on any other assignment. No notice needs to be given and no permission needs to be granted (i.e., you do not need to email me 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.

4.3. 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.

4.4. 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>. 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.

4.5. Artificial Intelligence. All Philosophy courses at Dalhousie emphasize 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, GrammarlyGo, etc.) should not be used to generate ideas or written material for any class offered by the Philosophy Department. 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

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.