

Syllabus – AST215H5S: Astronomical Revolutions – Winter 2022

Course description: This course offers an examination of the revolutions that have shaped astronomy from the time of Copernicus to the current day. Emphasis is placed on the process of discovery that has led to major advances in our knowledge about the Universe. The course includes an outline of the puzzles that have inspired the important shifts in our understanding of the Universe. These have been central to the development of astronomy, but also to physics and earth science, as well as philosophy, and the current discoveries of other solar systems is likely to have a major impact on the life sciences. This course is suited for both science and non-science students.

Course learning outcomes: On successful completion of the course, you will be able to:

- explain major changes in the history of astronomy and cosmology from the early modern period to the present
- recognize and describe the ideas of key figures in the history of astronomy and cosmology
- identify intellectual and social factors that cause scientific knowledge to change over time
- identify and describe scientific instruments that have shaped astronomy and cosmology
- evaluate historians' arguments about key figures and developments in history
- synthesize material from different topics to make arguments about particular subjects and about the history of astronomy and cosmology in general
- write a cogent essay about the development of astronomy and cosmology

Lecture schedule – VIA ZOOM UNTIL JANUARY 31, THEN IN PERSON

Monday: 11:00 a.m.-1:00 p.m. – MN 3210

Wednesday: 11:00 a.m.-12:00 p.m. – MN 3210

Instructor: Dr. Adam Richter – adam.richter@utoronto.ca

Office hours: Wed. 12:30-1:30 p.m. in CCT4055 (via Zoom in January)

Communications Policy

Students are welcome and encouraged to meet with the Course Instructor during the posted office hour. Visits outside of the regularly scheduled office hour can be made by appointment. Correspondence by e-mail is also acceptable. In all e-mail correspondence regarding this course, please note the following:

1. Please send e-mail only from your University of Toronto account.
2. In the Subject line of your message, please include the course code and a brief description of the topic, *e.g.* “AST215 - Request for an appointment”.
3. Please include your full name and student number in all correspondence.
4. Please consult the course syllabus and course website before sending questions by e-mail

I will endeavour to respond to e-mail within two workdays at the latest. You are responsible for all information posted to the course Quercus site (as accessed through <https://q.utoronto.ca>) and e-mails sent by me.

Marking Scheme:*Assignments:*

- | | |
|--------------------------------|--------------------|
| 1. Short essay, due February 6 | 15% of Course Mark |
| 2. Research essay, due April 3 | 25% of Course Mark |

Exams:

- | | |
|---|--------------------|
| 1. Midterm exam, held in class on February 16 | 25% of Course Mark |
| 2. Final exam, held during exam period | 25% of Course Mark |

Other evaluations:

- | | |
|----------------------------------|--------------------|
| 1. Attendance or response papers | 10% of Course Mark |
|----------------------------------|--------------------|

Total: 100%**Missed Term Work and Tests, Late Penalties and Absence Declarations**

Penalties for all term work missed or otherwise submitted late is as described in the text that follows unless valid and documented reasons exist for special consideration. Students may submit a request for special consideration **within one week** of the due date of the missed item of term work or date of the missed test. Requests for special consideration may be made by e-mail to the Course Instructor, from a valid University of Toronto (UofT) e-mail account. Students must also successfully complete an online absence declaration *via* ACORN and provide the Course Instructor with a confirmation of this declaration (*e.g.* a screenshot) in their petition for special consideration, which contains their student name, student number, absence dates and confirmation number. Note that ACORN absence declarations must be recorded for each day that you are absent – as soon as it begins up until the day you return to your classes or other activities. The ACORN absence declaration tool lets you record absences for up to 14 consecutive days, one of which must be the day you access the tool (if you are still absent) or the day prior (if you have returned). If you need to record an absence outside of this range, please contact the Office of the Registrar. More information about Absence Declarations can be found at: <https://www.utm.utoronto.ca/registrar/utm-absence>. The Course Instructor will inform the student by e-mail (as per the communication policy above) whether special consideration is granted following due diligence on the documentation provided.

If a student misses a midterm test, a mark of zero (0%) will be assigned unless a request for special consideration is made and granted by the Course Instructor. There will be no make-up tests and the mark value of the test will be re-assigned to the final exam (i.e. the final exam will be worth an additional 25% of the total mark for the course, e.g. 50% from 25%).

The penalty for late submission of essays is **3% deduction in the final mark per day** that the work is late, to a maximum of 15%, with one day considered to have elapsed at 12:01 a.m. at the end of the day when the essay is due. If a student's essay is more than five days late, it will not be accepted, and a mark of **zero (0%)** will be assigned unless a request for special consideration is made and granted by the Course Instructor, according to the criteria as described above.

Re-evaluation Requests

Requests for re-evaluation of an article of term work (*e.g.* essay or test) must be made in writing **within 1 month** of the return of the article of term work and include a brief explanation as to why the request is being made. Re-evaluation requests must be made to the same person that did the initial grading of the article of term work (i.e., the Course Instructor). You, as a UTM student, have the right to appeal a mark beyond the Course Instructor only if the term work in question is worth at least 20% of the course mark. Note that the final mark assigned to a re-evaluated article of term-work may go up or down

based on the outcomes of re-evaluation (in whole or in part, at the discretion of the marker).

Readings

The textbook for the class is **Craig Fraser, *The Cosmos: A Historical Perspective*** (Westport: Greenwood, 2006), and it is available in the UTM bookstore. Most classes have a short reading from the textbook, with page numbers given on the schedule below. The textbook is abbreviated “F”. Some classes will have additional readings, available online or on Quercus, and these are also indicated on the schedule below. Please complete the readings before class.

Lecture Schedule

<p>Week 1: Introduction</p> <p>-Monday, January 10: Course overview -Wednesday, January 12: Greek and Roman astronomy (F13-26)</p>
<p>Week 2: The Problem of the Planets 1</p> <p>-Monday, January 17: The medieval Islamic astronomers / Copernicus (F 35-53) -Wednesday, January 19: The Early Copernicans (Georg Rheticus, “Narratio Prima,” in <i>Three Copernican Treatises</i>, 3rd ed., trans. Edward Rosen [New York: Octagon, 1971], pp. 142-151, available on Quercus)</p>
<p>Week 3: The Problem of the Planets 2</p> <p>-Monday, January 24: Tycho, Kepler, and Descartes (F 55-56; John North, <i>Cosmos: An Illustrated History of Astronomy and Cosmology</i> [Chicago: University of Chicago Press, 2008], 403-406; Descartes, <i>The World</i>, ch. 8-10, https://www.princeton.edu/~hos/mike/texts/descartes/world/worldfr.htm) -Wednesday, January 26: Global history of science: astronomy on Jesuit missions (Lobsang Yongdan, “A Scholarly Imprint: How Tibetan Astronomers Brought Jesuit Astronomy to Tibet,” <i>East Asian Science, Technology, and Medicine</i> 45 [2017]: 91-117, available on Quercus)</p>
<p>Week 4: The Problem of the Planets 3</p> <p>-Monday, January 31: Galileo (F 65-68; Galileo Galilei, <i>The Starry Messenger</i>, available at https://people.rit.edu/wlrgsh/Galileo.pdf) -Wednesday, February 2: Huygens and Saturn (Nicole Howard, “Rings and Anagrams: Huygens’s System of Saturn,” <i>The Papers of the Bibliographical Society of America</i> 98 [2004]: 477-510, available on Quercus)</p>
<p>Week 5: Newton and Newtonianism</p> <p>***SHORT ESSAY DUE FEBRUARY 6***</p> <p>-Monday, February 7: Newton (F 68-72; Newton’s letter to Bentley, December 10, 1692, available at http://www.newtonproject.ox.ac.uk/view/texts/normalized/THEM00254) -Wednesday, February 9: Comets (Roger Ariew, “Theory of Comets at Paris during the Seventeenth Century,” <i>Journal of the History of Ideas</i> 53 [1992]: 355-372, available on Quercus)</p>

Week 6: Remaining Problems in Early Modern Astronomy

-Monday, February 14: Eclipses and transits / Longitude, the speed of light, and parallax (F 77-78; Daniel Hudon, “A [Not So] Brief History of the Transits of Venus,” *Journal of the Royal Astronomical Society of Canada* 99 (2004): 6-20, available on Quercus)

-Wednesday, February 16: **MIDTERM** (no reading)

*****READING WEEK – NO CLASS FEBRUARY 21-25*****

Week 7: Beyond the Solar System

-Monday, February 28: The Herschels and stellar astronomy / Spectroscopy (F 75-77, 78-86; John B. Hearnshaw, *The Analysis of Starlight: Two Centuries of Astronomical Spectroscopy*, 2nd ed. [Cambridge: Cambridge University Press, 2014], 15-32, available on Quercus)

-Wednesday, March 2: Astronomical photography (Robert Gendler and R. Jay Gabany, “The Birth and Evolution of Astrophotography,” in *Breakthrough! 100 Astronomical Images that Changed the World* [Cham: Springer, 2015], 1-13, available on Quercus)

Week 8: Physics and the Origins of the Universe 1

-Monday, March 7: Hubble, galaxies, and the expanding universe (F 87-91, 92-94, 97-99, 111-115)

-Wednesday, March 9: Searching for Vulcan (William Sheehan and Richard Baum, “Vulcan Chasers: The Search for an Inside Planet,” *Astronomy* 25 [1997]: 42-47, available on Quercus)

Week 9: Physics and the Origins of the Universe 2

*****MARCH 13: DROP DEADLINE FOR WINTER TERM*****

-Monday, March 14: Einstein, philosophy and religion / The Big Bang and Steady State Theories (F 105-111, 123-129; James Robert Brown, “Who Gets Einstein?” *Queen’s Quarterly* 108 [2001]: 74-83, available on Quercus; Donald H. Menzel, “Blast of Giant Atom Created Our Universe,” *Popular Science Monthly* 121 [1932]: 28-29, 105; available on Quercus)

-Wednesday, March 16: Radio astronomy (F 131-136)

Week 10: Back to Planets

-Monday, March 21: NASA, space exploration and space-based observation (F 137-141; Asif A. Siddiqi, “Competing Technologies, National[ist] Narratives, and Universal Claims: Toward a Global History of Space Exploration,” *Technology and Culture* 51 [2010], 425-443, available on Quercus)

-Wednesday, March 23: The Pluto debate: Lisa R. Messeri, “The Problem with Pluto: Conflicting Cosmologies and the Classification of Planets,” *Social Studies of Science* 40 [2010]: 187-214, available on Quercus

Week 11: Recent Developments

-Monday, March 28: Exoplanets / Einstein’s legacies: gravitational waves and black holes (F 144-147; David Wilkinson, “Searching for Another Earth: The Recent History of the Discovery of Exoplanets,” *Zygon* 51 [2016]: 414-430, available on Quercus; Dennis Overbye, “Darkness Visible, Finally: Astronomers Capture First Ever Image of a Black Hole,” *New York Times* [April 10, 2019], available on Quercus)

-Wednesday, March 30: **Guest Lecture** – Professor Hilding Neilson, David A. Dunlap Department of Astronomy & Astrophysics, University of Toronto – Title and reading TBA

Week 12: Today's Puzzles*****RESEARCH ESSAY DUE APRIL 3*****

-Monday, April 4: Extraterrestrial life / Dark matter and dark energy (F 147-153; Milan M. Ćirković, “Fermi’s Paradox – The Last Challenge for Copernicanism?” *Serbian Astronomical Journal* 178 [2009]: 1-31, available on Quercus)

-Wednesday, April 6: Exam review (no reading)

*****Final Exam in Exam Period*******Assignments**

Short essay: This short writing assignment will focus on our first major topic for the course: the “problem of the planets”. Your essay will compare two major thinkers (e.g., Eudoxus, Aristotle, Ptolemy, al-Tusi, Copernicus, Tycho, Kepler, Galileo) in terms of how they explain planetary motion. It is perfectly fine to base this essay on lecture material and assigned readings, but you can conduct additional research if you would like to do so. The maximum length will be **750 words**.

Midterm: The midterm test will be 50 minutes in length and will take place during a regularly scheduled lecture period, starting at precisely 11:10 a.m. The midterm will consist of short-answer questions based primarily on lecture material, with a few questions based on assigned readings. It will be held in class during Week 6. Material from Weeks 1-5 will be covered.

Research essay: This essay will allow you to conduct in-depth research on a subject of your choice. The subject can be any person, discovery, invention, instrument, event, or social factor that has contributed to a revolution in the history of astronomy and cosmology since the time of Copernicus. The goal is to make and defend a clear **argument** about this contribution to the history of astronomy. We will discuss strategies for constructing an argument in class.

Take-home final exam: Like the midterm, most the final exam will consist of short-answer questions based primarily on lecture material, with a few questions based on assigned readings. In addition, the final exam will include an essay question; you will be able to choose one essay question from among several choices. The short-answer questions will be based on material covered after the midterm. The essay question will ask you to synthesize material from the entire course. The final exam will be held during the exam period; the date will be announced when it becomes available.

Attendance: There are two ways to receive attendance marks. The first, of course, is to attend all classes (but you can have a single absence without being penalized). Secondly, if you’re unable to attend class one or both classes during a week, you can instead send me a **response paper of about 500 words** related to the week’s readings to make up that week’s attendance grades. Response papers should achieve the following: briefly summarize the reading; identify its main argument; and give your own critical assessment of that argument. They will be due on Sunday at 11:59 p.m. at the end of the week in question, and they will not be accepted late unless you and I have come to a specific arrangement prior to that deadline. Please note that this option is meant to be used if you are unable to attend class, including in cases when you feel unwell and think it would be better to stay home. The response papers are **not** a

substitute for attending lectures and learning the material first-hand; missing numerous classes will make it much more difficult to succeed on your written assignments and exams.

Additional Declarations

Student Technology Requirements and Connection Tools:

Zoom, which can be accessed through Quercus, will be used for lectures until January 31. Students are expected to review and be in compliance with the University of Toronto's requirements for online learning, which are available at <https://www.viceprovoststudents.utoronto.ca/tech-requirements-online-learning/>. Students are also strongly encouraged to familiarize themselves with the resources available on the UTM Library's Learn Anywhere website (<https://utm.library.utoronto.ca/students/quercus/learn-anywhere>).

Zoom will be used for office hours during January. To attend office hours, Students are required to register for a UTM Zoom account (Web Portal Login: <https://utoronto.zoom.us>).

Notice of Video Recording and Sharing:

This course, including your participation, will be recorded on video and will be available to students in the course for viewing remotely and after each session. Course videos and materials belong to your instructor, the University, and/or other sources depending on the specific facts of each situation, and are protected by copyright. In this course, you are permitted to download session videos and materials for your own academic use, but you should not copy, share, or use them for any other purpose without the explicit permission of the instructor. For questions about recording and use of videos in which you appear, please contact your instructor.

Mental Health Statement:

As a university student, you may experience a range of health and/or mental health challenges that could result in significant barriers to achieving your personal and academic goals. Please note, the University of Toronto (St. George and Mississauga campuses) offer a wide range of free and confidential services that could assist you during these times.

As a CPS student, you have an [Academic Advisor](#) who can support you by advising on personal matters that impact your academics. Other resources include:

- [Accessibility Services](#)
- [Health & Wellness \(St. George\)](#)
- [Health & Counselling Centre \(UTM\)](#)
- [My Student Support Program \(MySSP\)](#)
- [Good2Talk Student Helpline](#)
- [Navi](#)

If you find yourself feeling distressed and in need of more immediate support resources, consider reaching out to the counsellors at [My Student Support Program \(MySSP\)](#) or visiting the [Feeling Distressed webpage](#).

Intellectual Property:

All course materials belong to the Course Instructor, the University, and/or other sources (depending on the specific facts of each situation) and are protected by copyright. In this course, you are permitted to download materials for your own academic use, but you should not copy, share, or use them for any other purpose without the explicit permission of the Course Instructor.

Information Security Risks:

If you are a citizen of another country, and/or accessing your courses at the University of Toronto from a jurisdiction outside of Canada, please note that you may be subject to the laws of the country in which you are residing, or any country of which you have citizenship. The University of Toronto has a long-established commitment to freedom of expression, with this right enabled by an environment valuing respect, diversity, and inclusion. In your classes, you may be assigned readings, or discuss topics that are against the law in other jurisdictions. I encourage you to become familiar with any local laws that may apply to you and any potential impact on you if course content and information could be considered illegal, controversial, or politically sensitive. If you have any concerns about these issues, please contact your instructor directly to discuss with them

Academic Integrity:

With regards to remote learning and online courses, UTM wishes to remind students that they are expected to adhere to the Code of Behaviour on Academic Matters regardless of the course delivery method (see: <https://governingcouncil.utoronto.ca/secretariat/policies/code-behaviour-academic-matters-july-1-2019>). By offering students the opportunity to learn remotely, UTM expects that students will maintain the same academic honesty and integrity that they would in a classroom setting. Potential academic offences in a digital context include, but are not limited to:

- Accessing unauthorized resources (search engines, chat rooms, Reddit, *etc.*) for assessments.
- Using technological aids (*e.g.* software) beyond what is listed as permitted in an assessment.
- Posting test, essay, or exam questions to message boards or social media.
- Creating, accessing, and sharing assessment questions and answers in virtual “course groups.”
- Working collaboratively, in-person or online, with others on assessments that are expected to be completed individually.

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. If you have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, you are expected to seek out additional information on academic integrity from your instructor or from other institutional resources. For example, see: <https://www.utm.utoronto.ca/academic-integrity/resources/students>.

Normally, students will be required to submit their course essays to the University's plagiarism detection tool for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the Centre for Teaching Support & Innovation web site (<https://uoft.me/pdt-faq>).

Students are permitted opt-out of using Ouriginal, and notice of this decision must be delivered to the Course Instructor no later than the end of day on which the first class meeting occurs. This notice should be provided via email, as per the communication policy specified herein. In such a case, you may be asked to submit all of your rough work for an assignment, and you may be required to have a short meeting with the Course Instructor to discuss your research methodology.

Please note that the university takes breaches of academic honesty very seriously, and that offences can have lasting academic consequences far worse than failing an assignment. Academic dishonesty includes, but is not limited to, plagiarism. All work that you submit must be entirely your own. **Unacknowledged**

borrowing from any source, published or unpublished, will not be tolerated. Nor will any effort to portray someone else's work as your own. Academic honesty requires citing sources fully and properly. The citation style describe in the *Chicago Manual of Style* is preferred in this course. You may use a different citation style if you wish, as long as you use it consistently and correctly. If you have any doubts about how to cite correctly, or what constitutes academic dishonesty, please contact me. Finally, please remember that, in the age of the Internet, it is easy to detect plagiarism, so it is simply not worthwhile.

Academic Rights:

You, as a student at UTM, have the right to:

- Receive a syllabus by the first day of class.
- Rely upon a syllabus once a course is started. An instructor may only change assignments by following the University Assessment and Grading Practices Policy provision 1.3.
- Refuse to use Ouriginal (you must be offered an alternative form of submission).
- Have access to your Instructor for consultation during a course or follow up with the Department Chair if the Instructor is unavailable.
- Receive at least one significant mark (15% for H courses, 25% for Y courses) before the last day you can drop a course for H courses, and the last day of classes in the first week of January for Y courses taught in the Fall/Winter terms.
- Submit handwritten essays so long as they are neatly written.
- Have no assignment worth 100% of your final grade.
- Not have a term test worth 25% or more in the last two weeks of class.
- Retain intellectual property rights to your research.
- Receive all your assignments once graded.
- View your final exams. To see a final exam, you must submit an online Exam Reproduction Request within 6 months of the exam. There is a small non-refundable fee.
- Privacy of your final grades.
- Arrange for representation from Downtown Legal Services (DLS), a representative from the UTM Students' Union (UTMSU), and/or other forms of support if you are charged with an academic offence.

Course Code of Conduct and Expectations:

Each member of this course is expected to maintain a:

- Professional and respectful attitude during all course activities, including lectures any other online activities.
- Personal calendar/schedule/organizer to ensure that all course activities are completed and due dates are met.
- Collection of class notes recorded independently based on concepts covered in lectures and labs (students registered with Accessibility Services requiring a class note-taker will have access to this accommodation).
- Familiarity with the university policy on Academic Integrity (described above)

Support Resources:

The **University of Toronto Library** provides access to a vast collection of online and print resources to faculty, staff, and students and is the largest academic library in Canada. The UTM Library offers [Reference and Research Help](#) virtually, through chat, Zoom, and individual research consultations, to

help students navigate library databases, find relevant articles for their research, and cite correctly. The [Library Workshops and Events](#) help students learn about the search techniques and specialized software, needed to be successful in their academic journey. For more information, visit <http://library.utm.utoronto.ca>.

The **Robert Gillespie Academic Skills Centre** (RGASC) is located in Room 3251 on the third floor of the Maanjiwe nendamowinan Building. The RGASC offers individual consultations, workshops (many CCR-accredited), and a wide range of programs to help students identify and develop the academic skills they need for success in their studies. Much of their programming has shifted online while their physical office is closed to help prevent the spread of COVID-19. Visit the [RGASC website](#) to explore their online resources, book an online appointment, or learn about other programming such as Writing Retreats, the Program for Accessing Research Training (PART), Mathematics and Numeracy Support, and dedicated resources for English Language Learners.

In addition, you may find these resources helpful:

- Accessibility services (UTM): <https://www.utm.utoronto.ca/accessibility/welcome-accessibility-services>
- Equity, Diversity, & Inclusion Office: <https://www.utm.utoronto.ca/equity-diversity/home>
- Health & Counselling Centre: <https://www.utm.utoronto.ca/health/health-counselling-centre>
- Indigenous Centre: <https://www.utm.utoronto.ca/indigenous-centre/welcome-indigenous-centre>
- Office of the Registrar: <https://www.utm.utoronto.ca/registrar/office-registrar>

Equity Statement:

The University of Toronto is committed to equity and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect. As a Course Instructor, I will neither condone nor tolerate behaviour that undermines the dignity or self-esteem of any individual in this course and wish to be alerted to any attempt to create an intimidating or hostile environment. It is our collective responsibility to create a space that is inclusive and welcomes discussion. Discrimination, harassment and hate speech will not be tolerated. If you have any questions, comments, or concerns, you may contact the UTM Equity and Diversity officer at edo.utm@utoronto.ca or the University of Toronto Mississauga Students' Union Vice President Equity at vpequity@utmsu.ca.

Inclusivity Statement:

You belong [here](#). The University of Toronto commits to all students, faculty, and staff that you can learn, work, and create in a welcoming, respectful, and inclusive environment. In this class, we embrace the broadest range of people and encourage their diverse perspectives. This team environment is how we will innovate and improve our collective academic success. You can read the evidence for this approach [here](#).

We expect each of us to take responsibility for the impact that our language, actions and interactions have on others. The Department of Chemical and Physical Sciences (CPS) denounces discrimination, harassment and unwelcoming behaviour in all its forms. You have rights under the [Ontario Human Rights Code](#). If you experience or witness any form of harassment or discrimination, including but not limited to, acts of racism, sexism, Islamophobia, anti-Semitism, homophobia, transphobia, ableism and ageism, please tell someone so that we can intervene. CPS takes these reports extremely seriously. You can talk to anyone you feel comfortable approaching, including your professor, teaching assistant,

technician, an [academic advisor](#), our [Chairs](#), members of our [Equity, Diversity and Inclusivity Committee](#), or any staff member at our [Equity, Diversity & Inclusion Office](#).

You are not alone. Working together, we can all achieve our full potential.

Accommodations for Learning Needs:

The University of Toronto Mississauga supports accommodations for students with diverse learning needs, which may be associated with mental health conditions, learning disabilities, autism spectrum, ADHD, mobility impairments, functional/fine motor impairments, concussion or head injury, blindness and low vision, chronic health conditions, addictions, deafness and hearing loss, communication disorders and/or temporary disabilities, such as fractures and severe sprains, or recovery from an operation.

If you have a learning need requiring an accommodation, we recommend that students register as soon as possible with [Accessibility Services](#).

Phone: 905-569-4699

Email: access.utm@utoronto.ca

Accommodations for Religious Observances:

Following the University's policies, reasonable accommodations will be made for students who observe religious holy days that coincide with the due date/time of an assignment or lecture. Students must inform the instructor **before** the session/assignment date to arrange accommodations.

Acknowledgement of Traditional Lands:

We wish to acknowledge this land on which the University of Toronto operates. For thousands of years it has been the traditional land of the Huron-Wendat, the Seneca and, most recently, the Mississaugas of the Credit River. Today, this meeting place is still the home to many Indigenous people from across Turtle Island and we are grateful to have the opportunity to work on this land.