

Alex Koo  
Curriculum Vitae  
[alex.koo@utoronto.ca](mailto:alex.koo@utoronto.ca)

## **EDUCATION**

- 2015            Ph.D., University of Toronto, Institute for the History and Philosophy of Science and Technology  
Dissertation Title: Mathematical Explanation in Science
- 2004            Honours Bachelor of Science, University of Toronto

## **PROFESSIONAL APPOINTMENTS**

- 2018                      Lecturer, University of Toronto Mississauga, Department of Philosophy
- 2015, 2016, 2017        Lecturer, University of Toronto, Department of Philosophy

## **TEACHING EXPERIENCE**

### **University of Toronto**

Modern Symbolic Logic (Summer 2015; Fall & Winter 2015/16, 2016/17, 2017/18)  
Philosophy of Mathematics (Winter 2018)  
Topics in the Philosophy of Science (Winter 2017, Winter 2018)  
Symbolic Logic I (Fall 2016, Fall 2017)  
Reason and Truth (Fall 2017)  
Philosophy of Natural Science (Winter 2016, Fall 2016, Fall 2017)  
Philosophy and the Modern World (Winter 2017)  
Introduction to Philosophy (Fall/Winter 2015-16)

### **York University, Glendon College**

Belief, Truth and Knowledge (Winter 2015)

### **Seneca College**

Critical Thinking II (Winter 2015)  
Critical Understanding of Research (Winter 2015)  
Understanding Science and Technology (Fall 2014, Winter 2015)  
Law, Ethics, and Social Responsibility (Fall 2014)

### **Selected Teaching Assistant Roles: Tutorial Leader**

17<sup>th</sup> and 18<sup>th</sup> Century Philosophy (Summer 2013)  
Scientific Revolutions II (Winter 2011)  
Introduction to the History and Philosophy of Science (Fall 2010)  
Scientific Revolutions I (Fall 2009)

**Selected Teaching Assistant Roles: Grader**

Topics in History of Mathematics from 1700 (Winter 2012)

Topics in History of Mathematics to 1700 (Winter 2008)

**TEACHING AREAS**

**First and Second Year**

Logic; Introduction to Philosophy; Science, Technology and Society; Critical Reasoning; Probability and Inductive Logic; Epistemology & Metaphysics

**Third and Fourth Year**

Philosophy of Science; Philosophy of Mathematics

**PUBLICATIONS**

**Conference Proceedings**

2010 Koo, A. (2010). The Middle Road: A Response to Colyvan. *Proceedings of the Canadian Society for History and Philosophy of Mathematics*, 23, 183-191.

**Book Reviews**

2016 Koo, A. (2016). An Aristotelian Realist Philosophy of Mathematics by James Franklin. *The Mathematical Intelligencer*.

2014 Koo, A. (2014). The Application of Mathematics in Science. *Metascience*, 23(2), 263-268.

**Manuscripts Under Review**

Constructive Mathematical Empiricism  
Inference to the Best Explanation and Mathematical Realism  
Symbolic Logic as a Blended Course

**Manuscripts in Preparation**

Mathematical Explanation and the Indexing Argument

**AWARDS AND HONOURS**

2017 University of Toronto Advancing Teaching and Learning in Arts & Science (ATLAS) Fund – \$19,800

2017 University of Toronto Online Undergraduate Course Initiative (OUCI) Fund – \$6000

2017 University of Toronto Instructional Technology Innovation Fund (ITIF) Fund – \$2000

- 2015 University of Toronto Governor General's Gold Medals Dissertation Award – Nominee
- 2015 Canadian Association for Graduate Studies Distinguished Dissertation Award – Nominee
- 2014 University of Toronto Mississauga Teaching Assistant Excellence Award – Finalist
- 2011 Ontario Graduate Scholarship – \$15,000
- 2010 University of Toronto Teaching Assistant Training Program Teaching Excellence Award – Finalist

#### **ACADEMIC CONFERENCE ACTIVITY**

##### **Papers Presented**

- 2018 Inference to the Best Explanation and Mathematical Realism, Canadian Philosophical Association
- 2017 Constructive Mathematical Empiricism, Canadian Philosophical Association
- 2011 Examining the Relationship Between Internal and External Mathematical Explanations, Canadian Mathematical Society Winter Meetings
- 2011 Explanation or Representation: The Role of Mathematics in the Sciences, Causality and Explanation in the Sciences
- 2011 A Problem with the Inference to the Best Explanation for Mathematical Realism, Workshop: The Role of Mathematics in Science
- 2010 A Challenge for the Indexing Argument Against Mathematical Realism, Philosophy of Logic, Mathematics, and Physics Graduate Conference Western University of Ontario
- 2010 Indexing vs. Explanation: Breaking the Deadlock, Canadian Society for the History and Philosophy of Science Annual Meeting
- 2010 The Middle Road to Nominalist: A Response to Colyvan, Canadian Society for the History and Philosophy of Mathematics Annual Meeting
- 2009 Mathematical Explanation in Science: Arguments for Mathematical Realism, Virginia Tech Graduate Philosophy Conference: Contemporary Philosophy of Science

#### **CAMPUS AND DEPARTMENTAL TALKS**

- 2018 The Game (Theory) of Love, Philosophy Course Union Symposium on Love
- 2017 The Hybrid Classroom, Teaching and Learning Community of Practice
- 2016 Technology in the Classroom, Teaching and Learning Community of Practice

2016            The Replication Crisis, Mutual Relevance Lecture Series

**SERVICE TO PROFESSION**

**Journal Manuscript Review**

International Studies in the Philosophy of Science (2016)

Synthese (2015)

Studies in History and Philosophy of Science (2013)

**DEPARTMENTAL SERVICE AND OUTREACH**

Science Rendezvous Departmental Organizer (2018)

Advancing Teaching and Learning in Arts & Science Showcase Presentation (2017)

PHL1 Mentorship Program for First Year Students (2017)

Logic Lab Supervisor (2016/17, 2017/18)

Learning Management Engine Representative (2016, 2017)

Philosophy Course Union Events (2015, 2016, 2017)

Pre UofT Academic Orientation Event Faculty Panel (2015, 2016)

**EXTRA TRAINING**

Course Design/Redesign Institute, Centre for Teaching Support & Innovation (2017)