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TEACHING STATEMENT

I am passionate about education and pedagogy, with a focus on practical skills such as programming and data analysis that are not often taught as part of a traditional science curriculum. My teaching philosophy is comprised of three central tenets:

1. **CONCEPTUAL MASTERY**: Students should gain a deep understanding of the underlying themes and concepts of the course. This enables students to build intuition as well as transfer skills and knowledge gained from the course to other areas throughout their careers.
2. **EXPERIENTIAL LEARNING**: The most effective ways to learn always involve "hands-on" experience. Students should have many opportunities to directly apply the knowledge and skills they are learning to relevant problems and discuss these experiences with their peers.
3. **ACCESSIBILITY, EQUITY, AND INCLUSION**: Students should have the ability to access, pursue, and learn from these opportunities regardless of their background. Students should feel their unique backgrounds and identities strengthen their connection to the material.

To accomplish these goals, I focus on teaching methods that foster **student engagement** with material by building on a "flipped classroom" setting where students discuss and complete interactive exercises with peers. This presents a valuable framework for building frequent and "low-risk" student participation, encouraging peer collaboration, and lowering barriers to students asking questions.

There is a clear connection between **mental health** and academic success, and as an instructor my responsibility is to foster an environment where students can achieve both. To establish professional relationships with my students built on **empathy and kindness**, I actively emphasize my own history of struggle, failure, and eventual success and try to build connections beyond the scope of the course.

Courses should be explicitly designed to **reward diverse backgrounds**. Specifically, I aim to offer at least one long-term project where students are given substantial autonomy to decide its focus and execution. Ensuring students have the resources and support to make these projects a success is crucial to affirming their identity both within and outside the scientific community.

Finally, as an educator, **I am always looking to learn and grow.** All interactions start with believing in the students that I am privileged to work with and recognizing that they will always have a lot to teach me about being a better instructor. Living up to their expectations as well as my own will require continually tailoring my instruction to best fit their needs.

PAST EXPERIENCE

UNIVERSITY OF TORONTO

In my current position as a Banting & Dunlap Postdoctoral Fellow at the University of Toronto, I have developed two six-week courses that are expected to be offered starting Fall/Winter 2021: an interdisciplinary course on astrostatistics as well as a discussion-based seminar on research ethics.

HARVARD UNIVERSITY

During my graduate studies at Harvard University, I took an active leadership role in undergraduate education following these strategies. I was a Teaching Fellow for five courses during this time (ranging from 6-40 students), including introductory and advanced undergraduate courses for majors as well as general education courses for non-majors. As part of these courses, I led "flipped classroom" exercises, facilitated discussions on science, society, and inequality, developed and ran data analysis workshops, and helped to mentor independent student projects. Students gave me **overwhelmingly positive course reviews** (>4.7/5 for all courses) and I also received 3 **Certificates of Distinction in Teaching** as well as a **Teaching Award** from the Bok Center and the Department of Astronomy, respectively.

BANNEKER INSTITUTE

In addition to work inside the classroom, **I have taught programming and statistics to undergraduates from racialized and minoritized communities** in Astronomy as part of the Banneker Institute over the Summer of 2017, 2018, and 2019. As part of this work, I developed a two-week intensive curriculum, designed interactive coding exercises, and (co-)led classrooms to help give students the confidence and tools they need to tackle programming in their own research.

COURSES

HARVARD: Teaching Fellow
   ASTRON 22: The Unity of Science: From the Big Bang to the Brontosaurus and Beyond   *Spring 2020*

ASTRON 191: Astrophysics Laboratory   *Spring 2019*
ASTRON 17: Galactic and Extragalactic Astronomy   *Fall 2018*
ASTRON 130: Cosmology   *Spring 2018*
ASTRON 16: Stellar and Planetary Astronomy   *Spring 2017*

BANNEKER INSTITUTE: Course Instructor (2 weeks)

Introduction to Programming in Python   *Summer 2019*
Introduction to Programming in Python   *Summer 2018*
Introduction to Programming in Python   *Summer 2017*