

**Teaching:** I have extensive teaching experience with a wide range of learners in many different environments, including teaching in a middle school physical science classroom, teaching undergraduate majors and non-majors astronomy courses as a professor at San Jose State University, and teaching college level astronomy to incarcerated students as part of the Boston University Prison Education Program. One of the most important lessons I have learned in teaching is that my background is not representative of the diversity of students today. As an educator, my goal is to recognize and reward the wide range of strengths that students bring with them into the classroom. Teaching at UW-Madison, my main objective will be to create an inclusive environment which respects that students backgrounds and learning styles vary from my own, and provides in response a variety of instruction and assessment styles that cater to a broad range of students strengths and needs

A primary component of building an inclusive classroom environment is giving students the support they need in order to embrace growth and challenges. I work to strike a balance between both formative assessment (work that gives feedback on the effectiveness of both my own teaching methods as well as students' learning strategies) and summative assessment (graded work). This sends the message that practice and effort are rewarded, and that students should not be afraid to attempt new and difficult tasks. As a professor, I communicate to students that I believe in their ability to succeed, and that while the material might be challenging, their growth and performance in this class will reflect the effort they put in. By offering a wide range of ways that students can demonstrate mastery (e.g., group work, presentations, and open-book exams), and seeking feedback from students on all of these strategies, I ensure that students rise to the challenge of the course and succeed.

At UW-Madison I look forward to engaging students in a wide range of astronomy courses from introductory courses in all topics to Galaxies, the Interstellar Medium, Radio Astronomy Lab, and special topics courses in Computational Astrophysics. I will bring to these courses a wealth of experience implementing hands-on and inquiry-based teaching strategies that promote one-on-one teacher-student interactions in class sizes from 10-50<sup>1</sup>. I also look forward to working to scale these techniques up to larger classrooms.

**Mentoring:** In contrast to teaching, I believe the longer-term nature of mentoring means student success depends as much on interactions outside of classroom as inside of it. In mentoring students, I have worked to maintain this balance by focusing both on research skills (including reading papers, giving presentations, and choosing a career path) and holistic professional development (including discussions of work-life balance, mental health resources, and how to combat impostor syndrome). I work to facilitate student growth and independence by giving students research projects for which they can take ownership, and ultimately publish their results. As an advisor at UW-Madison, my students will be a priority in my schedule, and I will work to build a relationship where they are comfortable discussing their needs for success, not just as a researcher in my group, but as a student in and outside of school. Ultimately, I see my role as a mentor not to be the single point of support for my students, but to connect them with a larger professional network of training, research expertise, personal role models, and sources of encouragement that can most completely meet their needs and challenge them to grow.

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<sup>1</sup><http://eacmills.com/teaching.html>