BOB

[redacted]

Northern Arizona University *May 11, 2022*

Dear Hiring Committee,

(1) *A letter of application addressing the job description and qualifications.*

I'm interested in teaching as a Lecturer or (eventually) as an Assistant Teaching Professor. I've taught tens of undergraduate mathematics and statistics courses at ASU, NAU, CCC, and various community colleges in Phoenix, including elementary algebra, precalculus, trigonometry, calculus I-III, differential equations, linear algebra, mathematical reasoning, statistics, and data wrangling in R. This past year, I've served as a Lecturer at NAU, teaching STA 270, 444/445, 570, and 571. I want to teach with the department again because, among many things, teacher autonomy is respected; there's generally good communication from and between the chair, coordinators, committee leaders, and the teaching faculty; and, the small/moderate class sizes we typically teacher allow for more instructional individualization and better management of student engagement and success. I don't know what record there would be of this other than auditing my LMS announcements, but I am committed to engagement with DEIJ in my professional endeavors. I have a Master's degree in statistics, and expect to have a Ph.D. in mathematics education within a few years. In my most recent teaching evaluation for retention at ASU, I was designated as "highly meritorious," the highest tier of recommendation. My course averages are in line with (or better than) other teachers, and many students have emailed me after completing my course as they find continued success that they attribute to me and our work together. I'm interested in teaching single- and multi-section courses; mentoring undergraduate research; helping develop courses, curricula, improved pedagogy; and, serving on committees, some of which I've already served on.

(2) *A curriculum vitae.* and (6) *Unofficial graduate transcripts.*

Submitted separately.

(3) *Statement describing personal teaching philosophy.*

The students we serve vary wildly in their preparedness, confidence, attitude about learning, and personal identities and past experiences, so it's critical that we use teaching strategies (and tactics!) to accommodate this. To foster a learning environment where collaboration and productive struggle are valued, I get my students talking on Day 1 about the purpose of higher education and the benefits of making mistakes while developing skills, among other things. I want my students to value our time together and to have a sense of community that excludes nobody. Because of its positive effects on equity and achievement, I use active learning whenever I teach. Depending on the course and students, this could amount to a combination of whole-class discussions and group work, an entirely flipped classroom, or classes dedicated to individual or group student presentations. While I sometimes use direct instruction (read: lecture) to introduce new concepts, giving students room to explore, develop, and connect mathematical ideas is invaluable, allowing them to be inquisitive and express themselves creatively. Shifting the focus in the classroom from me to them, I'm able to connect with more students, helping to level the playing field. I think that technology is increasingly valuable in our society, perhaps especially in STEM fields, so I try to use and refer to it in all of my classrooms, with the depth of use or dependency on technology varying by class and/or topic. Some technological tools I use frequently are Desmos and R.

Despite all of these efforts to accommodate individual student learning or to connect the seemingly arbitrary, artificial, or contrived mathematics in the classroom to their use-cases in these students' futures, some students will invariably fall behind. Because I value the use of frequent formative assessments and check-ins to continuously monitor my students'

performance (and self-confidence and mental health), I am usually able identify these students early and reach out to them often to get them back on track. My grading is typically two-pronged: critical (but fair) on summative assessments to uphold the integrity of the course, while lenient and feedback-rich formative assessment in order to celebrate and/or promote growth and progress.

(4) *Statement describing desired future career path.*

I love teaching, so ultimately I'd like to hold some sort of permanent position with a high teaching load (teaching professor, not-really-tenured-but-basically-tenured lecturer, *etc.*). I've dabbled in statistics research (I am/was/it's complicated a Ph.D. statistics student), but didn't really like it. I've recently started working on a mathematics education project and I do like it more, but I'm still not so sure if research is my thing.

(5) *A description of your values, experiences, and training with DEIJ. Address past and future plans for the integration of DEIJ into your teaching, research, and service, and the impact of that on students, the institution, your discipline, and the broader community. You may also wish to address your experience or plans for building a respectful and inclusive organizational climate, recruiting of marginalized people, and raising awareness of DEIJ issues.*

I'm a big proponent of the idea that we can always do more to celebrate DEIJ in our classrooms, and doing so in math/stats classrooms comes with additional challenges (relative to other classes where discourse surrounding DEIJ is integral to their main topics). That said, a few of the ways I (try to) support diversity is by using non-Latin symbols or names, fashioning word problems with people of different sexes, genders, and abilities, and announcing events and holidays, especially those that are less mainstream or celebrated/concerning underrepresented peoples. I create positive social dynamics in the classroom by taking volunteers (for pride) and called-by-name (so that nobody is left behind and so that my students know that I know their names) answers, as well as letting groups self-select (to responsibly choose groups that learn well together) and be randomly-assigned (so that weird social dynamics don't continue on for so long as to compromise the learning environment). I consistently attend to and remind my students to be attentive of the differences between us, both in terms of mathematical preparedness and social factors. I try to make sure that I talk with people from underrepresented groups so that they feel seen, and invite them to speak up alongside their peers as we learn and work together as a community.

(7) *A summary of teaching evaluations (if available).*

My peer evaluations are generally quite positive ([redacted] and [redacted] from my references). My student evaluations are mixed: mostly, my students regard me highly as a person/mentor/teacher but are dissatisfied with the amount of direct instruction (lecture) I provide in my classes. From group work to Socratic class discussions to individual student presentations, I challenge my students to be active and engaged with their learning, something that many of them find difficult, especially the people who identify as "not math people." I've noticed that, as I grow as a teacher, this "buy-in" has been easier to recruit, with more and more students engaging with and appreciating my teaching practices.

(8) *Contact information for three references. At least one of the references should be able to address teaching.*

[redacted], and [redacted]. And, just to have some back-ups down in case people are busy this summer: [redacted], and [redacted]

Sincerely,

[redacted]

[redacted]

Education

Ph.D. in Mathematics Education *July 2024 (expected)*

Arizona State University

M.A. in Statistics *Dec. 2014*

Arizona State University

- Additionally, completed all required coursework, comprehensive exams, and prospectus for Ph.D. statistics

B.S. in Mathematics *May 2012*

Arizona State University

Work Experience

Instructor *Aug. 2021 — Aug. 2022*

Northern Arizona University

- Taught STA 570/571, STA 444/445, and STA 270

Instructor *Aug. 2020 — Present*

Arizona State University

- Taught calculus I-III, business mathematics, precalculus, and college algebra

Part-Time Faculty *Aug. 2019 — Present*

Coconino Community College

Instructor *Aug. 2019 — Aug. 2020*

Northern Arizona University

- Taught STA 275, STA 270, MAT 136, MAT 232, and MAT 239

Faculty Associate *Aug. 2018 — Aug. 2020*

Arizona State University

Adjunct Faculty *Aug. 2018 — June 2019*

Maricopa County Community College District

Teaching Assistant *Aug. 2012 — Aug. 2018*

Arizona State University

- Taught linear algebra and differential equations

Research Assistant *May 2016 — Aug. 2016*

Northern Arizona University

- Developed statistical models for ecological simulators

Tutor *Aug. 2012 — May 2016*

Mesa Community College

- Achieved level II certification under the CRLA's International Tutor Training Program

Instructional Aide, Tutor, and Grader *Aug. 2009 — Aug. 2014*

Arizona State University

Skills and Awards

Computer Skills R, Stan, Excel, MATLAB, SAS, SQL

Awards Block grant (2016), GAANN grant (Aug. 2013 — May 2015), President's Scholarship (Aug. 2007 — May 2011)