

James Ho

Student leader and materials researcher focused on the social, residential, and academic education of students

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<https://jameshomies.github.io/hojam/>

WORK/EDUCATION

Learning Assistant · OSU Department of Math, CBEE Department

Fall 2020, Fall 2022

- Answered questions for 120 students in Differential Calculus students during Zoom and on E-campus.
- Led studios with 48 students, graded assignments, held office hours, and presented two classroom lectures for Fluid Transport Phenomena.

Chemistry Tutor · Honors College

Fall 2021 – Present

- Created Discord server, coded a teaching website for General and Organic chemistry within the Honors Dorms,
- posted weekly worksheets, answered questions, held weekly office hours, scheduled 1:1 appointments, and hosted review session

Supplemental Instructions Leader · Academic Learning Services

Winter 2021 – Spring 2021

- Facilitated collaborative learning for 5 groups of 10 students weekly for general chemistry with personally tailored worksheets

Teaching Assistant · OSU Department of Chemistry

Fall 2020 - Present

- Independently taught several lab sections totaling over 100 students, held office hours, graded assignments, facilitated group learning, attended meetings on pedagogy

Resident Assistant · University Housing and Dining Services

Summer 2020 - Present

- Facilitated a sense of community, ensured a safe living environment, and promoted social justice and residential education for over 2,000 students in 9 various living-learning communities in total.

MATERIALS SCIENCE RESEARCH

Electrocereamics Group

Fall 2021-Present

- Collaborated with an international company to synthesize a new thermoresistant ceramic capacitor for cellphone

Materials and Discovery Lab

Spring 2021-Present

- Synthesized, characterized, and tested various metal-organic frameworks for gas catalysis and drug separations.
- First Author Publication in *Catalysis Science and Technology*, AIChE Conference, DOI: <https://doi.org/10.1039/D2CY01170K>

Subramanian Research Group

Winter 2021-Present

- Assisted two projects with GTA, synthesizing and characterizing solid solutions to better understand structure-property relationships and assisting in writing a second author manuscript

INVOLVEMENT

Center for Teaching and Learning

Winter 2022-Current

- Discourse in pedagogical challenges and inclusion. Taught other teaching and learning assistants how to be more inclusive teachers

Acacia Fraternity

Fall 2021-Current

- Deferred Academic Dean position to become fraternity tutor instead. Organized blood drives, park cleans, and philanthropies

OSTEM (Out in STEM)

Winter 2021-Current

- Increased visibility for LGBTQ+ students by hosting events, outreached high schools by starting inclusion dialogue

LGBTQ+ Affairs Coordinator · SafeGuard

Youth Summer 2020-Fall 2021

- Created content on the website, researched LGBTQ youth equity and Oregon policy, wrote an informational report and graphic for parents dealing with LGBTQ+ dependents

Suicide Crisis/Text Operator · The Trevor

Project Summer 2020-Summer 2022

- Volunteer operated the 24/7 LGBTQ+ suicide hotline and chat services 3 hours weekly

ChemE Car Club “Starting” Leader

Winter 2020-Current

- Led group of four students to engineer the chemical starting mechanism of the car. Competed in 2020 AIChE Nationals

SKILLS/ACTIVITIES

- Coded from scratch a research portfolio/chemistry teaching website using HTML, CSS and JavaScript
- Self-taught American Sign Language proficiency (6 years proficiency)
- Chemistry education and facilitating group learning
- Science communication, STEM outreach, and collaboration within materials scienc

